BLUE ROCK
ENVIRONMENTAL, INC.

Mr. Justin M. Shobe
Environmental Health Technician I
Humboldt County Health Department
Division of Environmental Health
100 H Street, Suite 100
Eureka, California 95501

May 19, 2006

Subject: **Second Quarter 2006 Groundwater Monitoring Report**
Former Totem Pole Market
580 South Fortuna Boulevard, Fortuna, CA
HCDEH LOP No. 12028
Blue Rock Project No. NC-40

Dear Mr. Shobe,

This document presents data collected during recent groundwater monitoring activities for the referenced project at 580 South Fortuna Boulevard, Fortuna, Humboldt County, California (site) (Figure 1), and it was prepared for Valerie Ellis by Blue Rock Environmental, Inc. (Blue Rock).

Background

Site Description
The former Totem Pole Market is located on the corner of South Fortuna Boulevard and 1st Street in Fortuna, California. The site is located in an area of low topographic relief and is considered part of the Eel River flood plain (Figure 1). The site contains one single-story building. The site formerly contained two (2) 1,000-gallon gasoline and one (1) 550-gallon used oil underground storage tanks (USTs) (Figure 2).

UST Removal & Overexcavation
In 1977, Beacom Construction (Beacom) of Fortuna, California, on behalf of Mr. Marvin Fork, closed the two 1,000 gallon USTs in place by filling with a cement slurry under regulations of the time. In 1988, an Unauthorized Release Form was filed by Mr. Fork with Humboldt County. In 1990, LACO Associates (LACO) was retained to evaluate the site for possible overexcavation. LACO subsequently supervised the excavation of three test pits to determine the feasibility of overexcavation.

In March 1994, the two (2) 1,000-gallon gasoline USTs were removed by Haberstock Construction. At that time, the third 550-gallon used oil UST was discovered and removed. The three (3) USTs were transported to Erickson Inc of Richmond, California. Following UST removal, approximately 180 cubic yards of petroleum hydrocarbon impacted soil was overexcavated and disposed of at B&J landfill in Vacaville, California.

Site Investigation History

Subsurface investigation activities have been ongoing at the site since 1995. A total of approximately 27 soil borings have been drilled and six monitoring wells (MW-1, MW-2, MW-3, MW-4S, MW-4D and MW-5D) had been installed at the site (Figure 2). Groundwater monitoring has been ongoing since the wells were installed. Following the installation of MW-4S, 4D and 5D, it was learned that two water bearing zones appeared to be present beneath the site. This prompted the destruction of MW-1 through MW-3 (screened through both zones) and the installation of two additional nested well pairs MW-1D, 1S, 3D and 3S. Wells MW-1S, MW-3S, and MW-4S are screened from ~4-9 ft bgs, which will be referred to as the "A-Zone". Wells MW-1D, MW-3D, MW-4D, and MW-5D are screened from ~14-19 ft bgs, which will be referred to as the "B-Zone".

Historical well construction data are summarized in Table 1. Historical soil and groundwater sample data are summarized in Tables 2, 3, and 4, respectively. Sample data from nearby private wells are summarized in Table 5.

Summary of Petroleum Type

The predominant types of impact that have been detected in the subsurface include total petroleum hydrocarbons as gasoline (TPHg), benzene, toluene, ethylbenzene, and xylenes (BTEX), and the fuel oxygenates MTBE, TBA, ETBE, and TAME. TPH as diesel (TPHd) has also been detected, but at lower levels.

Groundwater Monitoring – Second Quarter 2006

Groundwater Monitoring Field and Laboratory Activities

On April 4, 2006, six of the seven wells (MW-1S, MW-1D, MW-3S, MW-3D, MW-4S, and MW-4D) were gauged and sampled. MW-5D was not sampled or gauged due to the fact that a vehicle was parked over it thus the well was inaccessible.

Prior to sampling, an electronic water level indicator was used to gauge depth to water in each well, accurate to within ±0.01-foot. All wells were checked for the presence of light non-aqueous phase liquid (LNAPL) petroleum prior to purging. No measurable thicknesses of LNAPL were observed on groundwater in any of the wells.

In preparation for sampling, the wells were purged of groundwater until sampling parameters (temperature, pH, and conductivity) stabilized.

Following recovery of water levels to approximately 80% of their static levels, groundwater samples were collected from the wells using disposable polyethylene bailers and transferred to laboratory supplied containers. Sample containers were labeled, documented on a chain-of-custody form, and placed on ice in a cooler for transport to the project laboratory.

Purging instruments were cleaned between use by an Alconox® wash followed by double rinse in clean tap water to prevent cross-contamination. Purge and rinseate water was stored on-site in labeled 55-gallon drums pending future removal and disposal.

Groundwater monitoring and well purging information is presented on Gauge Data/Purge Calculations and Purge Data sheets (attached).

Groundwater samples were analyzed by Kiff Analytical (Kiff), a DHS-certified laboratory, located in Davis, California, for the following analytes:

- TPHd by EPA Method 8015M with silica gel cleanup
- TPHg EPA Method 8260B
- BTEX and MTBE by EPA Method 8260B

Groundwater Flow Direction and Gradient (A-Zone 4-9 ft bgs)
Static groundwater was present beneath the site in MW-1S, 3S, and 4S at depths ranging from approximately 2.24 (MW-3S) to 3.46 (MW-4S) feet bgs. Gauging data, combined with top of casing elevation data, were used to calculate groundwater elevation, and to generate a groundwater elevations and gradient map. The groundwater flow direction was calculated to be northwest at 0.063 ft/ft in this zone (Figure 3a). This flow direction is consistent with the only previous monitoring event using these wells in the First Quarter 2006.

Groundwater Flow Direction and Gradient (B-Zone 14-19 ft bgs)
Static groundwater was present beneath the site in MW-1D, 3D, and 4D at depths ranging from approximately 9.40 (MW-4D) to 11.23 (MW-3D) feet bgs. Gauging data, combined with top of casing elevation data, were used to calculate groundwater elevation, and to generate a groundwater elevations and gradient map. The groundwater flow direction was calculated to be south-southwest at 0.03 ft/ft in this zone (Figure 3b). This flow direction is consistent with the only previous monitoring event using these wells in the First Quarter 2006.

Vertical Gradient Evaluation
Groundwater elevations in the A-Zone wells were approximately 6 to 9 feet higher than those in the B-Zone wells. This condition shows potential downward movement of groundwater from the A- to B-Zone.

This condition may explain why the groundwater samples from MW-1D (B-Zone well) is the most impacted well. At this site, it appears much of gasoline impact to soil has spread laterally to the north and northwest from ~3-10 ft bgs by the northwesterly lateral groundwater flow in the A-Zone (~4-9 ft bgs). It appears water from the A-Zone eventually migrates downward, based on the fact that A-Zone groundwater elevations are higher than the B-Zone elevations, after the water has resided in contact with the gasoline impacts to soil from ~3-10 ft bgs. Thus, groundwater in MW-1D has passed through the soil impact at ~3-10 ft bgs and is laden with dissolved-phase gasoline by the time it reaches the B-Zone.

Groundwater Sample Analytical Results

Groundwater Sample Analytical Results (A-Zone 4-9 ft bgs)

LNAPL:	none
TPHd:	<50 µg/L (MW-4S) to < 800 µg/L (MW-1S)
TPHg:	<50 µg/L (MW-4S) to 1,700 µg/L (MW-1S)
Benzene:	<0.50 µg/L (MW-3S/4S) to 0.52 (MW-1S)
MTBE:	<0.50 µg/L (all wells)

Groundwater Sample Analytical Results (B-Zone 14-19 ft bgs)

LNAPL:	none
TPHd:	<50 µg/L (MW-3D, MW-4D) to <1,000 µg/L (MW-1D)
TPHg:	<50 µg/L (MW-4D) to 4,600 µg/L (MW-1D)
Benzene:	<0.50 µg/L (MW-3D, MW-4D) to 96 µg/L (MW-1D)
MTBE:	<0.50 µg/L (all wells)

Cumulative monitoring well groundwater sample data are summarized in Table 3, and cumulative grab groundwater sample data are summarized in Table 4. Cumulative groundwater sample data for the A- and B-Zones are shown on Figure 4a and 4b, respectively. Copies of the laboratory report and chain-of-custody form are attached.

Response to HCDEH letter dated April 5, 2006

In a correspondence dated April 5, 2006, The HCDEH responded to Blue Rock's *Well Installation and First Quarter 2006 Groundwater Monitoring Report* dated March 3, 2006 with several questions and / or comments. Each pertinent question / comment in the HCDEH letter is presented in italics followed by a response.

There is an interpretation on page 7 of the subject report, "The residual sorbed-phase gasoline plume appears to be delineated." Figure 6 shows Blue Rock's interpretation of TPHg in soil. Sorbed Phase concentrations in B-4/1-15 and MW-1S were recorded in the thousands of ppm. The interpretation on Figure 6 shows a contour of 100 ppm less than 10 feet in the downgradient direction from these borings. Additional borings may be necessary to test the hypothesis the TPHg in soil "Appears to be delineated"

As stated on page 7 of the subject report regarding the residual sorbed phase gasoline plume; "It is generally located at a depth of approximately 3 to 10 feet bgs, with the highest levels of TPHg remaining along the western side of the excavations and extending north and west under 1st Street; however, the extent of the residual sorbed-phase plume does not appear to encroach onto adjoining properties based on soil analytical data collected from B5/1-15 and B4-0299."

The extent of gasoline range sorbed-phase TPHg to the north of B-4/1-15 and MW-1S appears delineated by soil samples collected from B-5/1-15 at 5- and 10-ft bgs, in which TPHg was <1 mg/kg. Similarly, the extent of sorbed-phase TPHg to the northwest of B6/1-16 appears delineated by boring soil samples from B4-0299 at 5-, 9-, 14-, and 19- ft bgs in which TPHg was <1 mg/kg.

Cumulative soil sample data are presented on Table 2 and the estimated extent of TPHg in soil from ~3-10 ft bgs is shown on Figure 5.

Figures 5a and 5b show Blue Rock's interpretations of the limits of shallow and deep groundwater plumes, respectively. B-6/1-16 recorded 2,500 ppb TPHg in 1998. The interpretation on Figure 5a shows non-detect approximately 5 feet away from B-6/1-16 in the apparent downgradient direction. Similarly, MW-1D recently recorded 4,600 ppb TPHg. The interpretation on Figure 5b shows a contour of 100 ppb less than 15 feet north of MW-1D. Blue Rock's interpretations indicate TPHg concentrations in the thousands of ppb's degrade to non detect over a short distance (less than 15 feet) downgradient.

The dissolved phase TPHg concentration in MW-1D is too high to use this location as the distal edge of the groundwater contaminant plume. Additional holes in the downgradient direction are necessary to delineate the extent of contamination in groundwater.

The lateral extent of dissolved-phase TPHg in the A-zone was estimated using cumulative sample data collected from that zone (i.e. both grab groundwater and monitoring well data collected from ~4-9 ft bgs). Only two groundwater monitoring events have been completed with the new monitoring well suite that permit calculation of groundwater flow direction in this zone, which has twice shown flow in the A-Zone toward the northwest. Therefore, the downgradient extent of the A-Zone plume beyond MW-1S was estimated using data from B5-15. If the data previously collected from B5-15 does not satisfy the HCDEH's concern regarding delineation to the north, additional sampling in that direction will be needed.

The lateral extent of dissolved-phase TPHg in the B-zone was estimated using cumulative sample data collected from that zone (i.e. both grab groundwater and monitoring well data collected from ~14-19 ft bgs). Only two groundwater monitoring events have been completed with the new monitoring well suite that permit calculation of groundwater flow direction in this zone, which has twice shown flow in the B-Zone toward the south-southwest. Therefore, the downgradient of the B-Zone plume beyond MW-1D is toward the south-southwest, and not toward the north. Nevertheless, the northerly extent of dissolved-phase TPHg in the B-Zone beyond MW-1D is only delineated by the grab groundwater sample from B1-0299 and B4-0299 (TPHg <50 µg/L), which are located about 65 feet north-northeast and 37 feet west-northwest of MW-1D. A groundwater sample point in between MW-1D, B1-0299, and B4-0299 would shed light on the actual extent of dissolved-phase TPHg in the B-Zone.

Based on HCDEH comments in the April 5, 2006 letter, it appears that additional wells pairs and/or soil borings installed on the property to the north of MW-1S/1D (490 S. Fortuna Blvd) for would be useful in answering questions posed in that letter regarding distribution soil and groundwater impacts. In response to denial of access to the property in 2004, the HCDEH corresponded directly to the property owners in a letter dated January 10, 2005 citing Section 13267(b) of the California Water Code which requires property owners who deny access for this purpose to perform the requested work themselves. It is our understanding through conversation with Mr. Mark Verhey of the HCDEH, that the property owner of 490 S. Fortuna had recently contacted the HCDEH and exhibited a willingness to allow access to that property.

However, as stated in Blue Rock's report dated March 3, 2006, it appears additional monitoring would be useful to further evaluate trends in groundwater flow direction and gradient as well as trends in the magnitude and extent of chemical concentrations over time within the two water bearing zones.

In our previous correspondence we recommended relocating MW-3 closer to areas of identified soil contamination to the east. We are curious why you chose to keep the MW-3 well pair in the same location as the former MW-3. Please respond to our comments in the next report.

Due to the proximity of subsurface utilities located on the south side of First St, the MW-3 well pair was located as far east as possible (approximately 5 ft. and 10 ft. east of former MW-3) with out the risk of compromising the existing gas line and water line located on that side of the street (Figure 2). Also, MW-3S (A-Zone with screen 4-9 ft bgs) is located 16 feet downgradient (northwest) of the most impacted soil samples collected from the site at 4-to 5-ft bgs: 4,600 mg/kg TPHg #26. Therefore, the well is in a desirable location to intercept any dissolved-phase impact emanating from that impacted soil sample.

Project Status and Recommendations

The site is currently being monitored on a quarterly basis per the HCDEH directives. The next quarterly sampling event is scheduled for July 2006.

- Blue Rock was able to contact the property owner of 478 South Fortuna Blvd where a water well was presumably located. The property owner stated that the well is not in use and has not been used as long as he has owned the property. Additionally, the property owner stated that the well is not accessible due to the fact that it is buried beneath approximately two to three feet of topsoil planted with landscaped foliage.

- Blue Rock recommends continuation of a quarterly groundwater monitoring for a minimum of one hydrologic cycle with groundwater samples analyzed for TPHg, BTEX and MTBE by EPA Method 8260B and TPHd by EPA Method 8015M.

- Groundwater from all wells should be analyzed with the exception of MW-5D, as this well has been non-detect for TPHd, TPHg, BTEX, and Fuel Oxygenates from February 2005 to January 2006 (five monitoring events). Depth to water in MW-5D should continue to be collected for groundwater flow direction / gradient calculation in the B-Zone.

- Blue Rock recommends the preparation of a workplan which outlines the installation of additional well pairs and/or soil borings on the property to the north of MW-1S/1D.

References

LACO Associates Consulting Engineers. June 2005. *Subsurface Investigation Status Report and Groundwater Monitoring Report – Boring and Monitoring Well Installation and First Quarter 2005 Monitoring Results*. Former Totem Pole Market, Fortuna, CA.

Certification

This report was prepared under the supervision of a California Professional Geologist at Blue Rock. All statements, conclusions, and recommendations are based upon published results from past consultants, field observations by Blue Rock, and analyses performed by a state-certified laboratory as they relate to the time, location, and depth of points sampled by Blue Rock. Interpretation of data, including spatial distribution and temporal trends, are based on commonly used geologic and scientific principles. It is possible that interpretations, conclusions, and recommendations presented in this report may change, as additional data become available and/or regulations change.

Information and interpretation presented herein are for the sole use of the client and regulating agency. The information and interpretation contained in this document should not be relied upon by a third party.

The service performed by Blue Rock has been conducted in a manner consistent with the level of care and skill ordinarily exercised by members of our profession currently practicing under similar conditions in the area of the site. No other warranty, expressed or implied, is made.

If you have any questions regarding this project, please contact us at (707) 441-1934.

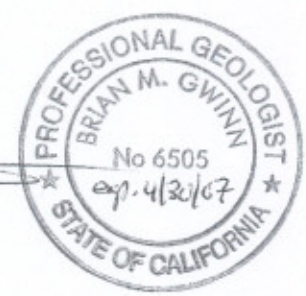
Sincerely,
Blue Rock Environmental, Inc.

Prepared by:

Andrew LoCicero
Project Scientist

Reviewed by:

Brian Gwinn, PG
Principal Geologist



Attachments

Table 1: Well Construction Details
Table 2: Soil Analytical Data
Table 3: Groundwater Elevations and Analytical Data
Table 4: Cumulative Grab Groundwater Analytical Data
Table 5: Domestic Well Analytical Data

Figure 1: Site Location Map
Figure 2: Site Plan
Figure 3a: Groundwater Elevations and Gradient 4/4/06 (A-Zone 4-9 ft bgs)
Figure 3b: Groundwater Elevations and Gradient 4/4/06 (B-Zone 14-19 ft bgs)
Figure 4a: Cumulative Groundwater Sample Results (A-Zone 4-9 ft bgs)
Figure 4b: Cumulative Groundwater Sample Results (B-Zone 14-19 ft bgs)
Figure 5: TPHg in Soil (~3-10 ft bgs)

Blue Rock Gauge / Purge Calculations
Laboratory Reports and Chain-of-Custody Forms

Distribution

Val Ellis, PO Box 378, Miranda, CA 95553

Table 1
WELL CONSTRUCTION DETAILS
Former Totem Pole Market
508 South Fortuna Boulevard, Fortuna, California
Blue Rock Project No. NC-40

Monitoring Well Identification	Date Intstalled	Intstalled by	Casing Diameter (inches)	Total Depth (feet)	Blank Interval (feet)	Screened Interval (feet)	Slot Size (inches)	Filter Pack (feet)	Bentonite Seal (feet)	Cement Grout (feet)
MW-1*	6/25/96	Laco	2	15	0-5	5-15	0.01	4-15	2-4	0-2
MW-2*	6/25/96	Laco	2	15	0-5	5-15	0.01	4-15	2-4	0-2
MW-3*	6/25/96	Laco	2	15	0-5	5-15	0.01	4-15	2-4	0-2
MW-4S	2/5/05	Laco	2	9	0-4	4-9	0.01	3-9	1-3	0-1
MW-4D	2/5/05	Laco	2	18	0-13	13-18	0.01	12-18	10-12	0-10
MW-5D	2/5/05	Laco	2	20	0-15	15-20	0.01	14-20	12-14	0-12
MW-1D	1/19/06	Blue Rock	2	19	0-14	14-19	0.01	13-19	12-13	0-12
MW-1S	1/19/06	Blue Rock	2	9	0-4	4-9	0.01	3-9	2-3	0-2
MW-3D	1/19/06	Blue Rock	2	19	0-14	14-19	0.01	13-19	12-13	0-12
MW-3S	1/19/06	Blue Rock	2	9	0-4	4-9	0.01	3-9	2-3	0-2

* = well has been destroyed

Table 2
SOIL ANALYTICAL DATA
Former Totem Pole Market
580 South Fortuna Boulevard, Fortuna, California
Blue Rock Project No. NC-40

Sample ID	Sample Depth (feet bgs)	Sample Date	TPHd (mg/kg)	TPHg (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)	MTBE (mg/kg)	TBA, ETBE, DIPE, TAME (mg/kg)	Pb (mg/kg)
1990 Test Pits											
3472-1	--	11/6/90	--	<1	<0.005	<0.005	<0.005	<0.01	--	--	--
3472-2	--	11/6/90	--		--	--	--	--	--	--	**6.8**
3472-3	--	11/6/90	--	<1	<0.005	<0.005	<0.005	<0.01	--	--	--
3472-4	--	11/6/90	--		<0.005	<0.005	<0.005	<0.01	--	--	**5.7**
1994 Overexcavation											
1	4' - 5'	3/1/94	--	**1.1**	<0.005	<0.005	<0.005	<0.01	--	--	--
2	4' - 5'	3/1/94	<1.0	<1.0	<0.005	<0.005	<0.005	<0.01	--	--	--
3	4' - 5'	3/1/94	--	<1.0	<0.005	<0.005	<0.005	<0.01	--	--	--
4	4' - 5'	3/1/94	--	--	--	--	--	--	--	--	**7**
5	5'	3/4/94	--	**3.2**	<0.005	<0.005	<0.02	<0.02	--	--	--
6	5'	3/4/94	--	**8.1**	<0.005	<0.005	<0.06	<0.06	--	--	--
7	5'	3/4/94	--	<1.0	<0.005	<0.005	<0.005	<0.01	--	--	--
8	5'	3/4/94	--	**400**	<0.05	<0.3	<10	<10	--	--	--
9	5'	3/4/94	--	<1.0	<0.005	<0.005	<0.005	<0.01	--	--	--
10	5'	3/4/94	--	<1.0	<0.005	<0.005	<0.005	<0.01	--	--	--
11	5'	3/4/94	--	<1.0	<0.005	<0.005	<0.005	<0.01	--	--	--
12	5'	3/4/94	--	<1.0	<0.005	<0.005	<0.005	<0.01	--	--	--
13	--	3/5/94	--	<1.0	<0.005	<0.005	<0.005	<0.01	--	--	--
14	--	3/5/94	--	<1.0	<0.005	<0.005	<0.005	<0.01	--	--	--
15	5'	3/5/94		**670**	<0.1	<0.5	<10	<10	--	--	--
16	4'-5'	3/11/94	--	**3.9**	<0.005	<0.005	<0.1	<0.1	--	--	--
17	4'-5'	3/11/94	--	**750**	<0.25	<0.25	<0.1	<0.1	--	--	--
18	4'-5'	3/11/94	--	<1.0	<0.005	<0.005	<0.005	<0.01	--	--	--
19	4'-5'	3/11/94	--	<1.0	<0.005	<0.005	<0.005	<0.01	--	--	--
20	--	3/14/94	--	<1.0	<0.005	<0.005	<0.005	<0.01	--	--	--
21	--	3/14/94	--	**1.5**	<0.005	<0.005	<0.005	<0.01	--	--	--
22	--	3/16/94	**35**	**670**	<1	<5	<5	<5	--	--	**7.7**
23	4'-5'	3/21/94	--	<1.0	<0.005	<0.005	<0.005	<0.01	--	--	--
24	4'-5'	3/21/94	--	<1.0	<0.005	<0.005	<0.005	<0.01	--	--	--
25	4'-5'	3/21/94	--	<1.0	<0.005	<0.005	<0.005	<0.01	--	--	--
26	4'-5'	3/22/94	--	**4,600**	<1.3	<10	<50	<50	--	--	--
27	4'-5'	3/22/94	--	**590**	<0.25	<2	<10	<10	--	--	--
28	4'-5'	3/22/94	--	**980**	**0.52**	<5	<20	<20	--	--	--
1A,1B,1C,1D	SP	4/1/94	--	**450**	<0.1	<1	<10	<10	--	--	**11**
2A,2B,2C,2D	SP	4/1/94	--	**1.4**	<0.005	<0.005	<0.005	<0.01	--	--	**17**
1996 Investigation											
B-1	3'	2/27/96	--	<1.0	<0.005	<0.005	<0.005	<0.01	<0.05	--	--
B-2	2.5'	2/27/96	--	<1.0	<0.005	<0.005	<0.005	<0.01	<0.05	--	--
B-2	8'	2/27/96	--	<1.0	<0.005	<0.005	<0.005	<0.01	<0.05	--	--
B-3	2'	2/27/96	--	**480**	**0.15**	<0.03	<5	<5	<0.5	--	--
B-3	7' - 9'	2/27/96	--	**370**	<.1	<0.2	<0.4	<0.4	<1	--	--
B-3	12' 14'	2/27/96	--	**50**	**0.049**	<0.05	<1	<1	<0.05	--	--
B-5	2.5'	2/27/96	--	**57**	**0.042**	<0.05	<0.5	<0.5	<0.05	--	--
B-5	7'	2/27/96	--	**5.1**	**0.037**	**0.012**	**0.056**	**0.243**	<0.05	--	--
B-6	2.5'	3/1/96	--	<1.0	<0.005	<0.005	<0.005	<0.01	<0.05	--	--
B-6	7'	3/1/96	--	<1.0	<0.005	<0.005	**0.014**	**0.029**	<0.05	--	--
MW-1	4.5'-6.5'	6/25/96	<1.0	<1.0	<0.005	<0.005	<0.005	<0.005	<0.05	--	--
MW-1	10'-11.5'	6/25/96	<1.0	<1.0	<0.005	<0.005	<0.005	<0.005	<0.05	--	--
MW-1	15'-16.5'	6/25/96	--	**30**	<0.025	<0.025	<0.5	<0.5	<0.05	--	**5.5**
MW-2	5'-6.5'	6/25/96	--	<1.0	<0.005	<0.005	<0.005	<0.005	<0.05	--	**5.2**
MW-2	10'-11.5'	6/25/96	<1.0	<1.0	<0.005	<0.005	<0.005	<0.005	<0.05	--	--
MW-2	15'-16.5'	6/25/96	<1.0	<1.0	<0.005	<0.005	<0.005	<0.005	<0.05	--	--
PZ-3	5'-6.5'	6/25/96	--	<1.0	<0.005	<0.005	<0.005	<0.005	<0.05	--	**5.7**
PZ-3	10'-11.5'	6/25/96	<1.0	<1.0	<0.005	<0.005	<0.005	<0.005	<0.05	--	--
PZ-3	15'-16.5'	6/25/96	<1.0	<1.0	<0.005	<0.005	<0.005	<0.005	<0.05	--	--

Table 2
SOIL ANALYTICAL DATA
Former Totem Pole Market
580 South Fortuna Boulevard, Fortuna, California
Blue Rock Project No. NC-40

Sample ID	Sample Depth (feet bgs)	Sample Date	TPHd (mg/kg)	TPHg (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)	MTBE (mg/kg)	TBA, ETBE, DIPE, TAME (mg/kg)	Pb (mg/kg)
1997 Investigation											
B-1/1-15	5'	1/15/97	--	<1.0	<0.005	<0.005	<0.005	<0.005	<0.05	--	--
B-1/1-15	10'	1/15/97	--	<1.0	<0.005	<0.005	<0.005	<0.005	<0.05	--	--
B-2/1-15	3'	1/15/97	--	<1.0	<0.005	<0.005	<0.005	<0.005	<0.05	--	--
B-2/1-15	5'	1/15/97	--	**1.1**	<0.005	<0.005	<0.005	<0.005	<0.05	--	--
B-2/1-15	10'	1/15/97	--	**4.9**	<0.005	<0.5	<0.5	<0.5	<0.05	--	--
B-3/1-15	5'	1/15/97	--	<1.0	<0.005	<0.005	<0.005	<0.005	<0.05	--	--
B-3/1-15	10'	1/15/97	--	<1.0	<0.005	<0.005	<0.005	<0.005	<0.05	--	--
B-4/1-15	5'	1/15/97	--	**1,700**	<.5	<2.5	<20	<20	<5	--	--
B-4/1-15	10'	1/15/97	--	<1.0	**0.0052**	<0.005	**0.02**	**0.027**	<0.05	--	--
B-5/1-15	3'	1/15/97	--	<1.0	<0.005	<0.005	<0.005	<0.005	<0.05	--	--
B-5/1-15	5'	1/15/97	--	<1.0	<0.005	<0.005	<0.005	<0.005	<0.05	--	--
B-5/1-15	10'	1/15/97	--	<1.0	<0.005	<0.005	<0.005	<0.005	<0.05	--	--
B-6/1-16	2.5'	1/16/97	--	<1.0	<0.005	<0.005	<0.005	<0.005	<0.05	--	--
B-6/1-16	5'	1/16/97	--	**910**	<0.5	<0.5	<10	<10	<5	--	--
B-7/1-16	1.5'	1/16/97	--	<1.0	<0.005	<0.005	<0.005	<0.005	<0.05	--	--
B-7/1-16	5'	1/16/97	--	<1.0	<0.005	<0.005	<0.005	<0.005	<0.05	--	--
B-8/1-16	3'	1/16/97	--	<1.0	<0.005	<0.005	<0.005	<0.005	<0.05	--	--
B-8/1-16	5'	1/16/97	--	**83**	**0.62**	**3.3**	**0.77**	**2.9**	<0.25	--	--
B-9/1-16	5'	1/16/97	--	**130**	<0.13	<0.13	<.5	<.5	<0.13	--	--
B-9/1-16	10'	1/16/97	--	<1.0	<0.005	<0.005	<0.005	<0.005	<0.05	--	--
B-9/1-16	15'	1/16/97	--	<1.0	<0.005	<0.005	<0.005	<0.005	<0.05	--	--
1999 Investigation											
3472 B1 - 029	5'	2/17/99	--	**39**	<0.005	<0.005	<0.5	<0.5	<0.05	--	--
3472 B2 - 029	5'	2/17/99	--	<1.0	<0.005	<0.005	<0.005	<0.005	<0.05	--	--
3472 B2 - 029	9'	2/17/99	--	<1.0	<0.005	<0.005	<0.005	<0.005	<0.05	--	--
3472 B2 - 029	14'	2/17/99	--	<1.0	<0.005	<0.005	<0.005	<0.005	<0.05	--	--
3472 B2 - 029	19'	2/17/99	--	<1.0	<0.005	<0.005	<0.005	<0.005	<0.05	--	--
3472 B3 - 029	5'	2/17/99	--	<1.0	<0.005	<0.005	<0.005	<0.005	<0.05	--	--
3472 B3 - 029	9'	2/17/99	--	<1.0	<0.005	<0.005	<0.005	<0.005	<0.05	--	--
3472 B3 - 029	14'	2/17/99	--	<1.0	<0.005	<0.005	<0.005	<0.005	<0.05	--	--
3472 B3 - 029	19'	2/17/99	--	<1.0	<0.005	<0.005	<0.005	<0.005	<0.05	--	--
3472 B4 - 029	5'	2/17/99	--	<1.0	<0.005	<0.005	<0.005	<0.005	<0.05	--	--
3472 B4 - 029	9'	2/17/99	--	<1.0	<0.005	<0.005	<0.005	<0.005	<0.05	--	--
3472 B4 - 029	14'	2/17/99	--	<1.0	<0.005	<0.005	<0.005	<0.005	<0.05	--	--
3472 B4 - 029	19'	2/17/99	--	<1.0	<0.005	<0.005	<0.005	<0.005	<0.05	--	--
3472 B5 - 029	5'	2/18/99	--	<1.0	<0.005	<0.005	<0.005	<0.005	<0.05	--	--
3472 B5 - 029	9'	2/18/99	--	<1.0	<0.005	<0.005	<0.005	<0.005	<0.05	--	--
3472 B5 - 029	14'	2/18/99	--	<1.0	<0.005	<0.005	<0.005	<0.005	<0.05	--	--
3472 B5 - 029	19'	2/18/99	--	<1.0	<0.005	<0.005	<0.005	<0.005	<0.05	--	--
2001 Investigation											
HB1-01	4.5'	1/5/01	--	<1.0	<0.005	<0.005	<0.005	<0.005	<0.05	--	--
HB2-01	4.5'	1/5/01	--	<1.0	<0.005	<0.005	<0.005	<0.005	<0.05	--	--
HB3-01	4.5'	1/5/01	--	**1.7**	<0.005	<0.005	<0.005	<0.005	<0.05	--	--
HB4-01	4.5'	1/5/01	--	**1**	<0.005	<0.005	<0.005	<0.005	<0.05	--	--
HB5-01	4.5'	1/5/01	--	**1,100**	<0.25	<0.25	<2	<2.5	<2.5	--	--
HA-EJF1	5'	6/21/01	--	**1.2**	<0.005	<0.005	<0.005	<0.005	<0.05	--	--

Table 2
SOIL ANALYTICAL DATA
Former Totem Pole Market
580 South Fortuna Boulevard, Fortuna, California
Blue Rock Project No. NC-40

Sample ID	Sample Depth (feet bgs)	Sample Date	TPHd (mg/kg)	TPHg (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)	MTBE (mg/kg)	TBA, ETBE, DIPE, TAME (mg/kg)	Pb (mg/kg)
2005 Investigation											
B-10	8	2/2/05	**3.1**	<1.0	<0.005	<0.005	<0.005	<0.01	<0.025	<0.01 -<0.5	--
B-10	12	2/2/05	**1.6**	<1.0	<0.005	<0.005	<0.005	<0.01	<0.025	<0.01 -<0.5	--
B-10	16	2/2/05	<1.0	<1.0	<0.005	<0.005	<0.005	<0.01	<0.025	<0.01 -<0.5	--
B-10	20	2/2/05	**3.1**	<1.0	<0.005	<0.005	<0.005	<0.01	<0.025	<0.01 -<0.5	--
B-11	4	2/2/05	**14**	**53**	<0.005	<0.005	<0.005	<0.01	<0.025	<0.01 -<0.5	--
B-11	8	2/2/05	**4**	<1.0	<0.005	<0.005	<0.005	<0.01	<0.025	<0.01 -<0.5	--
B-11	12	2/2/05	**1.7**	<1.0	<0.005	<0.005	<0.005	<0.01	<0.025	<0.01 -<0.5	--
B-11	16	2/2/05	<1.0	<1.0	<0.005	<0.005	<0.005	<0.01	<0.025	<0.01 -<0.5	--
B-11	20	2/2/05	<1.0	<1.0	<0.005	<0.005	<0.005	<0.01	<0.025	<0.01 -<0.5	--
B-12	4	2/2/05	<1.0	<1.0	<0.005	<0.005	<0.005	<0.01	<0.025	<0.01 -<0.5	--
B-12	8	2/2/05	**2.3**	<1.0	<0.005	<0.005	<0.005	<0.01	<0.025	<0.01 -<0.5	--
B-12	12	2/2/05	<1.0	<1.0	<0.005	<0.005	<0.005	<0.01	<0.025	<0.01 -<0.5	--
B-12	16	2/2/05	<1.0	<1.0	<0.005	<0.005	<0.005	<0.01	<0.025	<0.01 -<0.5	--
B-12	20	2/2/05	<1.0	<1.0	<0.005	<0.005	<0.005	<0.01	<0.025	<0.01 -<0.5	--
2006 Investigation											
MW-1D@ 5'	5	1/19/06	**31**	**8.1**	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01 -<0.005	--
MW-1D@ 10'	10	1/19/06	<1.0	<1.0	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01 -<0.005	--
MW-1D@ 15'	15	1/19/06	**150**	**110**	**0.088**	<0.025	**0.36**	**0.40**	<0.025	<0.15 -<0.025	--
MW-1D@ 19'	19	1/19/06	<1.0	<1.0	<0.005	<0.005	<0.005	<0.005	<0.005	0.0063[1] -<0.005	--
MW-1S@ 4'	4	1/19/06	**2,800**	**2,600**	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20 - <0.90	--
MW-1S@ 9'	9	1/19/06	<1.0	<1.0	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	--
MW-3D@ 5'	5	1/19/06	<1.0	<1.0	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	--
MW-3D@ 10'	10	1/19/06	<1.0	<1.0	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	--
MW-3D@ 15'	15	1/19/06	<1.0	<1.0	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	--
MW-3D@ 19'	19	1/19/06	<1.0	<1.0	<0.005	<0.005	<0.005	<0.005	<0.005	0.0064[1] -<0.005	--
MW-3S@ 4'	4	1/19/06	<1.0	<1.0	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	--
MW-3S@ 9'	9	1/19/06	**150**	**120**	**0.015**	<0.005	**0.040**	**0.085**	<0.005	<0.015 - <0.005	--

Notes

bgs: below ground surface
"--" Not analyzed, available or applicable
mg/kg = milligrams per kilogram
<###: Not detected above the method detection limit as shown
TPHg: Total petroleum hydrocarbons as gasoline by EPA Method 5030/8015M or 5030/8260B
TPHd: Total petroleum hydrocarbons as diesel by EPA Method 8015
BTEX by EPA Method 8020 or 8260B
MTBE: Methyl tertiary butyl ether by EPA 8020 or 8260B
Lead by EPA Method 6010

TBA: Tertiary butanol by EPA 8260B
DIPE: Di isopropyl ether by EPA 8260B
ETBE: Ethyl tertiary butyl ether by EPA 8260B
TAME: Tertiary amyl methyl ether by EPA 8260E
[1] : Concentration of TBA

Table 3
GROUNDWATER ELEVATIONS AND ANALYTICAL DATA
Former Totem Pole Market
580 South Fortuna Boulevard, Fortuna, California
Blue Rock Project No. NC-40

Sample ID	Sample Date	TOC (feet)	DTW (feet)	SPH (feet)	GWE (feet)	TPHd (µg/L)	TPHg (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	MTBE (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	Pb (µg/L)
A-Zone Wells (~4-9 ft bgs)																	
MW-1S	1/30/06	58.98	2.17	0.00	56.81	<200	**260**	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--
Screen	4/4/06	58.98	2.41	0.00	56.57	<800	**1,700**	**0.52**	<0.5	**6.9**	<0.5	<0.5	--	--	--	--	--
4' - 9'																	
MW-3S	1/30/06	59.04	1.55	0.00	57.49	<100*	**200**	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--
Screen	4/4/06	59.04	2.24	0.00	56.80	<300*	**800**	<0.5	<0.5	<0.5	**0.74**	<0.5	--	--	--	--	--
4' - 9'																	
MW-4S	2/28/05	58.15	3.39	0.00	54.76	<50	<50	<0.5	<0.5	<0.5	<0.5	<1	ND	ND	ND	ND	--
Screen	5/2/05	58.15	3.57	0.00	54.58	<50	<50	<0.5	<0.5	<0.5	<0.5	<1	ND	ND	ND	ND	--
4' - 9'	8/9/05	58.15	4.55	0.00	53.60	**67**	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<0.5	<0.5	--
	8/18/05	58.15	6.70	0.00	51.45	--	--	--	--	--	--	--	--	--	--	--	--
	12/14/05	58.15	3.95	0.00	54.20	<50	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<0.5	<0.5	--
	1/30/06	58.15	3.44	0.00	54.71	<50*	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--
	4/4/06	58.15	3.46	0.00	54.69	<50*	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--
B-Zone Wells (~14-19 ft bgs)																	
MW-1D	1/30/06	58.77	10.59	0.00	48.18	<1,000*	**4,600**	**96**	**1.4**	**47**	**120**	<0.5	--	--	--	--	--
Screen	4/4/06	58.77	10.08	0.00	48.69	<800*	**6,000**	**300**	**4.4**	**130**	**190**	<0.5	--	--	--	--	--
14' - 19'																	
MW-3D	1/30/06	58.95	10.97	0.00	47.98	<50*	**110**	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--
Screen	4/4/06	58.95	11.23	0.00	47.72	<50*	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--
14' - 19'																	
MW-4D	2/28/05	58.03	11.93	0.00	46.10	<50	<50	<0.5	<0.5	<0.5	<0.5	<1	ND	ND	ND	ND	--
Screen	5/2/05	58.03	11.13	0.00	46.90	<50	<50	<0.5	<0.5	<0.5	<0.5	<1	ND	ND	ND	ND	--
13' - 18'	8/9/05	58.03	13.22	0.00	44.81	<50	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<0.5	<0.5	--
	8/18/05	58.03	13.66	0.00	44.37	--	--	--	--	--	--	--	--	--	--	--	--
	12/14/05	58.03	12.96	0.00	45.07	<50	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<0.5	<0.5	--
	1/30/06	58.03	9.40	0.00	48.63	<50*	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--
MW-5D	2/28/05	57.20	11.05	0.00	46.15	<50	<50	<0.5	<0.5	<0.5	<0.5	<1	ND	ND	ND	ND	--
Screen	5/2/05	57.20	10.31	0.00	46.89	<50	<50	<0.5	<0.5	<0.5	<0.5	<1	ND	ND	ND	ND	--
15' - 20'	8/9/05	57.20	12.41	0.00	44.79	<50	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<0.5	<0.5	--
	8/18/05	57.20	12.86	0.00	44.34	---	---	---	---	---	---	---	---	---	---	---	---
	12/14/05	57.20	12.04	0.00	45.16	<50	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<0.5	<0.5	--
	1/30/06	57.20	9.03	0.00	48.17	<50*	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--
	4/4/06	57.20	**No Access**														

Table 3
GROUNDWATER ELEVATIONS AND ANALYTICAL DATA
Former Totem Pole Market
580 South Fortuna Boulevard, Fortuna, California
Blue Rock Project No. NC-40

Sample ID	Sample Date	TOC (feet)	DTW (feet)	SPH (feet)	GWE (feet)	TPHd (µg/L)	TPHg (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	MTBE (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	Pb (µg/L)
Destroyed Wells - Potentially Screened Across A- & B-Zones																	
MW-1	8/12/96	98.70	13.92	0.00	84.78	<500	**1,700**	**72**	<3	**24**	**72**	<10	--	--	--	--	--
Screen	9/9/96	98.70	14.40	0.00	84.30	--	--	--	--	--	--	--	--	--	--	--	--
5' - 15'	10/8/96	98.70	14.40	0.00	84.30	--	--	--	--	--	--	--	--	--	--	--	--
	11/25/96	98.70	6.00	0.00	92.70	**110**	**1,700**	**31**	<5	**38**	**59**	<5	--	--	--	--	<2
	1/9/97	98.70	4.78	0.00	93.92	--	--	--	--	--	--	--	--	--	--	--	--
	2/4/97	98.70	4.92	0.00	93.78	**330**	**930**	**1.8**	<10	**14**	20	<5	--	--	--	--	--
	3/19/97	98.70	10.05	0.00	88.65	--	--	--	--	--	--	--	--	--	--	--	--
	4/7/97	98.70	11.66	0.00	87.04	--	--	--	--	--	--	--	--	--	--	--	--
	5/1/97	98.70	12.11	0.00	86.59	**480**	**790**	**1.3**	2.7	**5.9**	**16.7**	<5	--	--	--	--	--
	6/3/97	98.70	12.64	0.00	86.06	--	--	--	--	--	--	--	--	--	--	--	--
	7/7/97	98.70	13.57	0.00	85.13	--	--	--	--	--	--	--	--	--	--	--	--
	8/13/97	98.70	13.98	0.00	84.72	--	--	--	--	--	--	--	--	--	--	--	--
	1/16/98	98.70	9.32	0.00	89.38	--	--	--	--	--	--	--	--	--	--	--	--
	5/5/98	98.70	9.79	0.00	88.91	**190**	**1,000**	**2.8**	<2	**15**	<10	<5	--	--	--	--	--
	2/22/99	98.70	7.61	0.00	91.09	--	--	--	--	--	--	--	--	--	--	--	--
	3/5/99	98.70	--	0.00	--	**120**	**830**	<5	<5	**12**	<5	<5	--	--	--	--	--
	5/3/01	98.70	12.22	0.00	86.48	**300**	**4,700**	**14**	<30	**28**	**38**	<30	--	--	--	--	--
	9/4/01	98.70	13.95	0.00	84.75	--	--	--	--	--	--	--	--	--	--	--	--
	11/9/01	98.70	13.90	0.00	84.80	--	--	--	--	--	--	--	--	--	--	--	--
	2/25/03	98.70	9.54	0.00	89.16	**140**	**1,900**	**0.85**	<0.5	**5.5**	**0.74**	<1	ND	**3.9**	ND	ND	--
	5/16/03	98.70	7.82	0.00	90.88	**220**	**1,500**	<0.5	<0.5	**3.8**	**<.5**	<1	ND	**4.3**	ND	ND	--
	8/6/03	98.70	13.59	0.00	85.11	**280**	**2,000**	**1.4**	<0.5	**4.4**	**1.0**	<1	ND	**3.0**	ND	ND	--
	11/11/03	98.70	13.97	0.00	84.73	--	**2,000**	**4.3**	<0.5	**3.4**	**1.8**	<1	ND	ND	ND	ND	--
	2/17/04	98.70	5.96	0.00	92.74	**290**	**2,600**	<.5	<0.5	**5.0**	**0.53**	<1	ND	ND	ND	ND	--
	5/14/04	98.70	12.31	0.00	86.39	**140**	**2,200**	**1.2**	<0.5	**3.0**	**1.31**	<1	ND	ND	ND	ND	--
	8/17/04	98.70	13.98	0.00	84.72	--	**2,700**	**3.5**	<0.5	**3.1**	**0.87**	<1	ND	ND	ND	ND	--
	11/30/04	98.70	13.96	0.00	84.74	--	**2,900**	**10**	<0.5	**3.0**	**1.0**	<1	ND	ND	ND	ND	--
	2/28/05	58.63	8.75	0.00	49.88	**160**	**3,700**	<.5	<0.5	**4.4**	**0.60**	<1	ND	**2.3**	ND	ND	--
	5/2/05	58.63	10.17	0.00	48.46	**330**	**3,200**	**0.66**	<0.5	**2.9**	**0.62**	<1	ND	**4.1**	ND	ND	--
	8/9/05	58.63	13.15	0.00	45.48	--	--	--	--	--	--	--	--	--	--	--	--
	8/18/05	58.63	13.25	0.00	45.38	<1,000*	**1,800**	**1.9**	<0.5	**1.9**	<0.5	<0.5	**9.7**	**5.2**	<0.5	<0.5	--
	12/14/05	58.63	11.20	0.00	47.43	<500*	**1,000**	**0.69**	<0.5	**2.5**	<0.5	<0.5	**8.7**	**5.3**	<0.5	<0.5	--
	1/30/06	**Well Destroyed 1/19/06**															

Table 3
GROUNDWATER ELEVATIONS AND ANALYTICAL DATA
Former Totem Pole Market
580 South Fortuna Boulevard, Fortuna, California
Blue Rock Project No. NC-40

Sample ID	Sample Date	TOC (feet)	DTW (feet)	SPH (feet)	GWE (feet)	TPHd (µg/L)	TPHg (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	MTBE (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	Pb (µg/L)
Destroyed Wells - Potentially Screened Across A- & B-Zones																	
MW-2	8/12/96	99.45	17.17	0.00	82.28	<500	<50	<0.5	<0.5	<0.5	<0.5	<5	ND	ND	ND	ND	--
Screen	9/9/96	99.45	14.58	0.00	84.87	--	--	--	--	--	--	--	--	--	--	--	--
5' - 15'	10/8/96	99.45	14.56	0.00	84.89	--	--	--	--	--	--	--	--	--	--	--	--
	11/25/96	99.45	4.70	--	--	<500	<50	<0.5	<0.5	<0.5	**0.77**	<5	ND	ND	ND	ND	0.028
	1/9/97	99.45	4.39	0.00	95.06	--	--	--	--	--	--	--	--	--	--	--	--
	2/4/97	99.45	3.20	0.00	96.25	<500	<50	<0.5	<0.5	<0.5	<0.5	**69**	ND	ND	ND	ND	--
	3/19/97	99.45	4.36	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	4/7/97	99.45	10.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	5/1/97	99.45	4.79	0.00	94.66	<500	<50	<0.5	**0.55**	<0.5	**1.59**	<5	ND	ND	ND	ND	--
	6/3/97	99.45	13.80	0.00	85.65	--	--	--	--	--	--	--	--	--	--	--	--
	7/7/97	99.45	14.18	0.00	85.27	--	--	--	--	--	--	--	--	--	--	--	--
	8/13/97	99.45	14.18	0.00	85.27	--	--	--	--	--	--	--	--	--	--	--	--
	1/16/98	99.45	13.63	0.00	85.82	--	--	--	--	--	--	--	--	--	--	--	--
	5/5/98	99.45	11.57	0.00	87.88	<500	<50	<0.5	<0.5	<0.5	<0.5	<5	ND	ND	ND	ND	--
	2/22/99	99.45	12.65	0.00	86.80	--	--	--	--	--	--	--	--	--	--	--	--
	3/5/99	99.45	8.51	0.00	90.94	<500	<50	<0.5	<0.5	<0.5	<0.5	<5	ND	ND	ND	ND	--
	5/3/01	99.45	11.64	0.00	87.81	--	--	--	--	--	--	--	--	--	--	--	--
	9/4/01	99.45	14.08	0.00	85.37	<500	<50	<0.5	<0.5	<0.5	<0.5	<5	ND	ND	ND	ND	--
	11/9/01	99.45	13.99	0.00	85.46	--	--	--	--	--	--	--	--	--	--	--	--
	2/25/03	99.45	3.35	0.00	96.10	--	--	--	--	--	--	--	--	--	--	--	--
	5/16/03	99.45	4.72	0.00	94.73	--	--	--	--	--	--	--	--	--	--	--	--
	8/6/03	99.45	13.70	0.00	85.75	--	--	--	--	--	--	--	--	--	--	--	--
	11/11/03	99.45	14.04	0.00	85.41	--	--	--	--	--	--	--	--	--	--	--	--
	2/17/04	99.45	1.22	0.00	98.23	<500	<50	<0.5	<0.5	<0.5	<0.5	<5	ND	ND	ND	ND	--
	5/14/04	99.45	12.74	0.00	86.71	--	--	--	--	--	--	--	--	--	--	--	--
	8/17/04	99.45	14.20	0.00	85.25	--	--	--	--	--	--	--	--	--	--	--	--
	11/30/04	99.45	13.03	0.00	86.42	--	--	--	--	--	--	--	--	--	--	--	--
	2/28/05	58.97	2.92	0.00	56.05	<500	<50	<0.5	<0.5	<0.5	<0.5	<5	ND	ND	ND	ND	--
	5/2/05	58.97	10.08	0.00	48.89	--	--	--	--	--	--	--	--	--	--	--	--
	8/9/05	58.97	14.03	0.00	44.94	--	--	--	--	--	--	--	--	--	--	--	--
	8/18/05	58.97	14.03	0.00	44.94	--	--	--	--	--	--	--	--	--	--	--	--
	12/14/05	58.97	8.04	0.00	50.93	--	--	--	--	--	--	--	--	--	--	--	--
	1/30/06	**Well Destroyed 1/19/06**															

Table 3
GROUNDWATER ELEVATIONS AND ANALYTICAL DATA
Former Totem Pole Market
580 South Fortuna Boulevard, Fortuna, California
Blue Rock Project No. NC-40

Sample ID	Sample Date	TOC (feet)	DTW (feet)	SPH (feet)	GWE (feet)	TPHd (µg/L)	TPHg (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	MTBE (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	Pb (µg/L)
Destroyed Wells - Potentially Screened Across A- & B-Zones																	
MW-3	8/12/96	98.89	16.95	0.00	81.94	<200	<50	<0.5	<0.5	<0.5	<0.5	<5	--	--	--	--	--
Screen	9/9/96	98.89	13.93	0.00	84.96	--	--	--	--	--	--	--	--	--	--	--	--
5' - 15'	10/8/96	98.89	14.79	0.00	84.10	--	--	--	--	--	--	--	--	--	--	--	--
	11/25/96	98.89	2.54	0.00	96.35	<50	<50	<0.5	<0.5	<0.5	<0.5	<5	--	--	--	--	--
	1/9/97	98.89	2.58	0.00	96.31	--	--	--	--	--	--	--	--	--	--	--	--
	2/4/97	98.89	2.04	0.00	96.85	<50	<50	<0.5	<0.5	<0.5	<0.5	<5	--	--	--	--	--
	3/19/97	98.89	2.97	0.00	95.92	--	--	--	--	--	--	--	--	--	--	--	--
	4/7/97	98.89	3.31	0.00	95.58	--	--	--	--	--	--	--	--	--	--	--	--
	5/1/97	98.89	2.32	0.00	96.57	<50	<50	<0.5	<0.5	<0.5	<0.5	<5	--	--	--	--	--
	6/3/97	98.89	2.55	0.00	96.34	--	--	--	--	--	--	--	--	--	--	--	--
	7/7/97	98.89	10.75	0.00	88.14	--	--	--	--	--	--	--	--	--	--	--	--
	8/13/97	98.89	14.14	0.00	84.75	--	--	--	--	--	--	--	--	--	--	--	--
	1/16/98	98.89	0.51	0.00	98.38	--	--	--	--	--	--	--	--	--	--	--	--
	5/5/98	98.89	3.32	0.00	95.57	<50	<50	<0.5	<0.5	<0.5	<0.5	<5	--	--	--	--	--
	2/22/99	98.89	1.00	0.00	97.89	--	--	--	--	--	--	--	--	--	--	--	--
	3/5/99	98.89	--	--	---	<50	<50	<0.5	<0.5	<0.5	<0.5	<5	--	--	--	--	--
	5/3/01	98.89	2.95	0.00	95.94	--	--	--	--	--	--	--	--	--	--	--	--
	9/4/01	98.89	14.15	0.00	84.74	<50	<50	<0.5	<0.5	<0.5	<0.5	<5	--	--	--	--	--
	11/9/01	98.89	11.39	0.00	87.50	--	--	--	--	--	--	--	--	--	--	--	--
	2/25/03	98.89	4.24	0.00	94.65	--	--	--	--	--	--	--	--	--	--	--	--
	5/16/03	98.89	3.18	0.00	95.71	--	--	--	--	--	--	--	--	--	--	--	--
	8/6/03	98.89	14.02	0.00	84.87	--	--	--	--	--	--	--	--	--	--	--	--
	11/11/03	98.89	2.87	0.00	96.02	--	--	--	--	--	--	--	--	--	--	--	--
	2/17/04	98.89	0.74	0.00	98.15	<50	<50	<0.5	<0.5	<0.5	<0.5	<1	ND	ND	ND	ND	ND
	5/14/04	98.89	9.12	0.00	89.77	--	--	--	--	--	--	--	--	--	--	--	--
	8/17/04	98.89	14.15	0.00	84.74	--	--	--	--	--	--	--	--	--	--	--	--
	11/30/04	98.89	3.26	0.00	95.63	--	--	--	--	--	--	--	--	--	--	--	--
	2/28/05	58.85	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	5/2/05	58.85	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	8/9/05	58.85	12.64	0.00	46.21	<50	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<0.5	<0.5	--
	8/18/05	58.85	13.82	0.00	45.03	---	---	---	---	---	---	---	---	---	---	---	--
	12/14/05	58.85	3.56	0.00	55.29	---	---	---	---	---	---	---	---	---	---	---	--
	1/30/06	**Well Destroyed 1/19/06**															
					MCL	--	---	1.0	150	300	1,750	13					
					Taste and odor threshold	--	5	---	42	29	17	5					
					NCRWQCB Cleanup Goals	100	50	0.5	42	29	17	5					

Notes :
TOC: Top of well casing referenced to arbitrary site benchmark until 3/02, MSL thereafter
DTW: Depth to water as referenced to top of casing
SPH: Separate phase hydrocarbon on top of groundwater
GWE: Groundwater elevation as referenced to benchmark
µg/L = micrograms per liter
TPHg: Total petroleum hydrocarbons as gasoline by Method 5030/8015M or 5030/8260B
TPHd: Total petroleum hydrocarbons as diesel by Method 8015 (* = silica-gel clean-up)
MTBE: Methyl tertiary butyl ether by Method 8020 or 8260B
TBA: Tertiary butyl alcohol by Method 8260B
DIPE: Di isopropyl ether by Method 8260B
ETBE: Ethyl tertiary butyl ether by Method 8260B
TAME: Tertiary amyl methyl ether by method 8260B
MCL : Maximum contaminant level
NCRWQCB : North Coast Region Water Quality Control Board

Table 4
CUMULATIVE GRAB GROUNDWATER ANALYTICAL DATA
Former Totem Pole Market
580 South Fortuna Blvd., Fortuna, California
Blue Rock Project No. NC-40

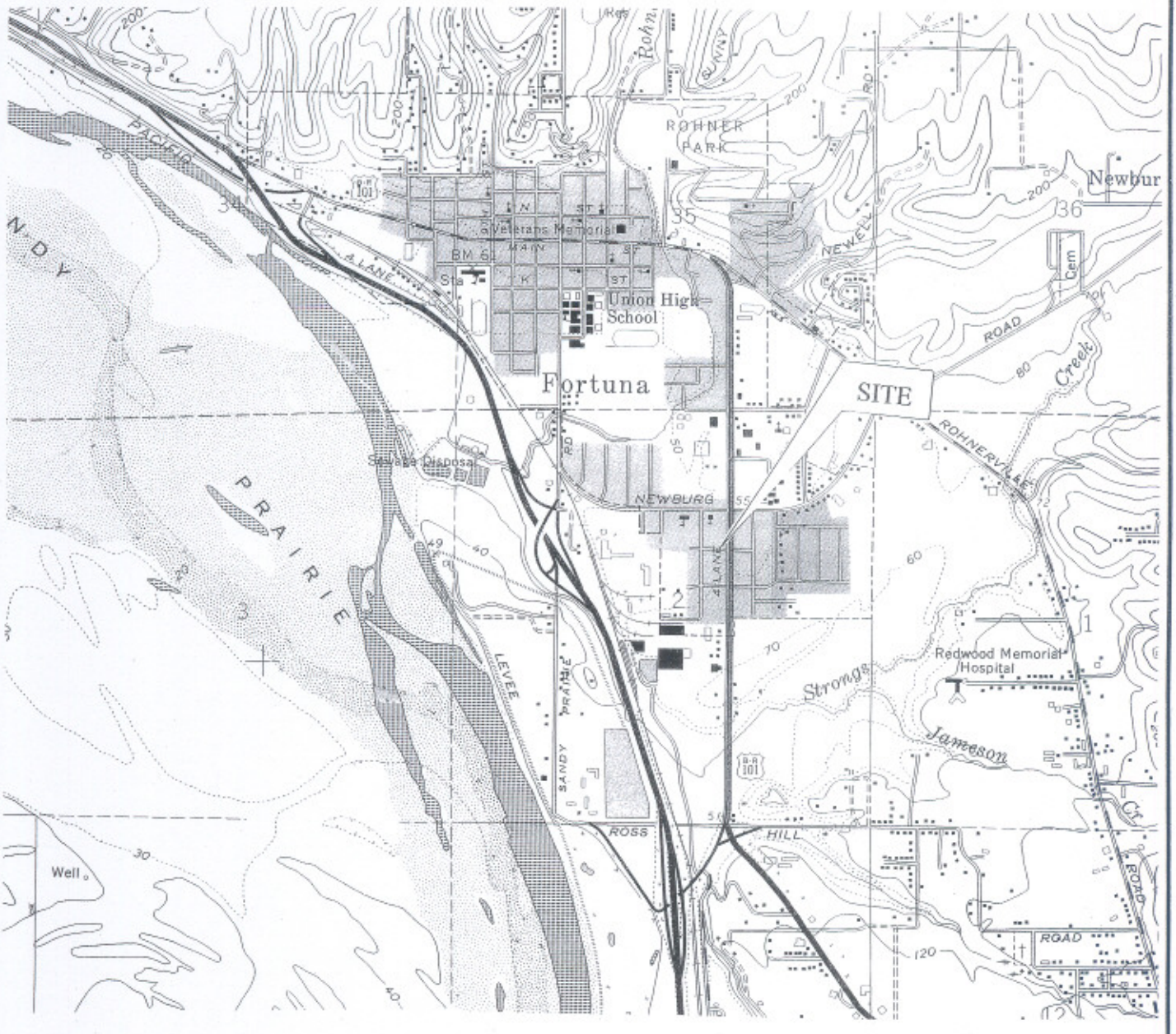
Sample No.	Boring Depth (feet bgs)	Water Depth (feet bgs)	Sampling Date	TPHd (µg/L)	TPHg (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	MTBE (µg/L)
A-Zone Grab Samples (~4 to 9 feet)										
B-1	7	3	2/27/96	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
B-1/1-15	10	2.5	1/15/97	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
B-2/1-15	10	3	1/15/97	--	**3,200**	<2.5	<7	<20	<20	<25
B-3/1-15	10	2.5	1/15/97	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
B-4/1-15	10	3	1/15/97	--	**1,600**	<4	<5	<12	<12	<5
B-5/1-15	10	1.75	1/15/97	--	<50	<0.5	<0.5	<0.5	<0.5	<5
B-6/1-16	10	1.5	1/16/97	--	**2,500**	<5	<5	<30	<30	<50
B-7/1-16	10	2	1/16/97	--	**50**	<0.5	<0.5	<1.5	<1.5	<5
B-8/1-16	10	2.5	1/16/97	--	**470**	<0.5	<4	<8	<8	<5
HA-EJF1	5	4.5	6/21/01	--	<50	<0.5	<0.5	<0.5	<0.5	<3
B-Zone Grab Samples (~14 to 19 feet)										
B-9/1-16	20	16	1/16/97	--	<50	<0.5	<0.5	<0.5	<0.5	<5
B2-0299	19	17	2/17/99	--	<50	<0.5	<0.5	<0.5	<0.5	<5
B3-0299	19	14	2/17/99	--	<50	<0.5	<0.5	<0.5	<0.5	<5
B4-0299	19	14	2/17/99	--	<50	<0.5	<0.5	<0.5	<0.5	<5
B10-W16-20	20	14	2/2/05	--	<50	<0.5	<0.5	<0.5	<0.5	<1
Grab Samples from Potentially Mixed Zones										
B-3	14	2	2/27/96	--	**14,000**	**120**	<50	**370**	**80**	<130
B5-0299	19	10	2/17/99	--	<50	<0.5	<0.5	<0.5	<0.5	<5

Notes :
µg/L: micrograms per liter
"--": Not analyzed, available, or applicable
TPHd: Total petroleum hydrocarbons as diesel
TPHg: Total petroleum hydrocarbons as gasoline
BTEX: benzene, toluene, ethylbenzene, xylenes
MTBE: Methyl tertiary butyl ether
Note: Data transcribed from LACO data

Table 5
DOMESTIC WELL ANALYTICAL DATA
Former Totem Pole Market
580 South Fortuna Boulevard, Fortuna, California
Blue Rock Project No. NC-40

Well ID	Sample Date	TPHd (µg/L)	TPHg (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	MTBE (µg/L)	Other Analytes (1) (µg/L)
555 S. Spring St.	3/12/01	**58***	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5-<50
	5/2/01	<50	---	---	---	---	---	---	---
491 S. Spring St.	3/12/01	<50	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5-<50
1702 1st Street	3/16/01	<50	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5-<50

Notes :
TPHg: Total petroleum hydrocarbons as gasoline by Method 5030/8015M or 5030/8260B
TPHd: Total petroleum hydrocarbons as diesel by Method 8015
BTEX: by Method 8020 or 8260B
MTBE: Methyl tertiary butyl ether by Method 8020 or 8260B
(1): Other Analytes tested by LACO, but not specified in 9/26/03 letter
*: LACO reports in 9/26/03 letter that the samlpe contains material in diesel range, but that the peak pattern is atypical of diesel fuel. The TPHd results represent the amount of material in the diesel range.
µg/L: micrograms per liter



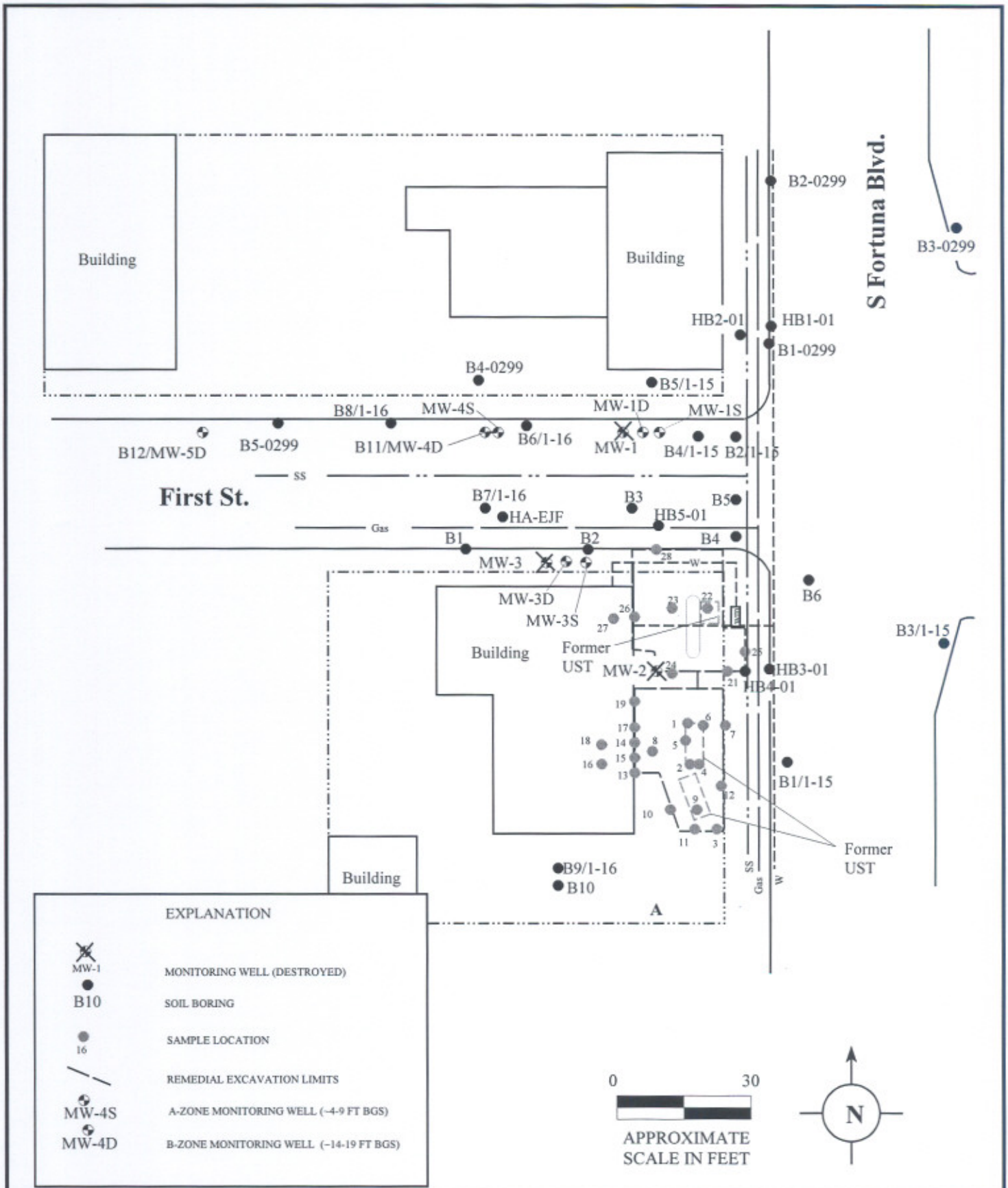
MAP SOURCE: USGS Fortuna Quadrangle

Site Location Map

Former Totem Pole Market
580 South Fortuna Boulevard
Fortuna, California

BLUE ROCK ENVIRONMENTAL, INC.

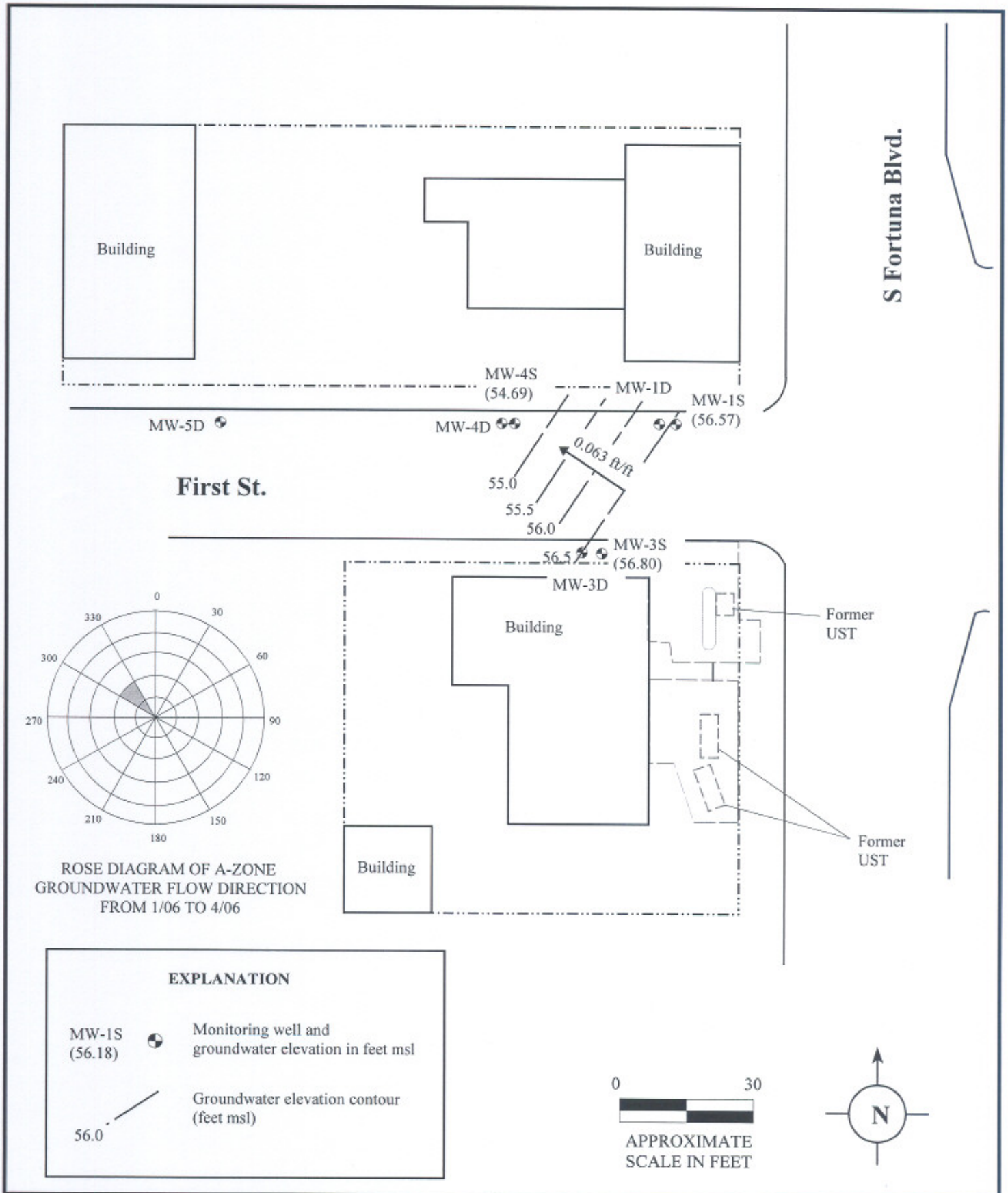
Project No.	Figure Date	Figure
NC-40	5/06	1



Site Plan
Former Totem Pole Market
580 S. Fortuna Blvd
Fortuna, CA

BLUE ROCK ENVIRONMENTAL, INC.

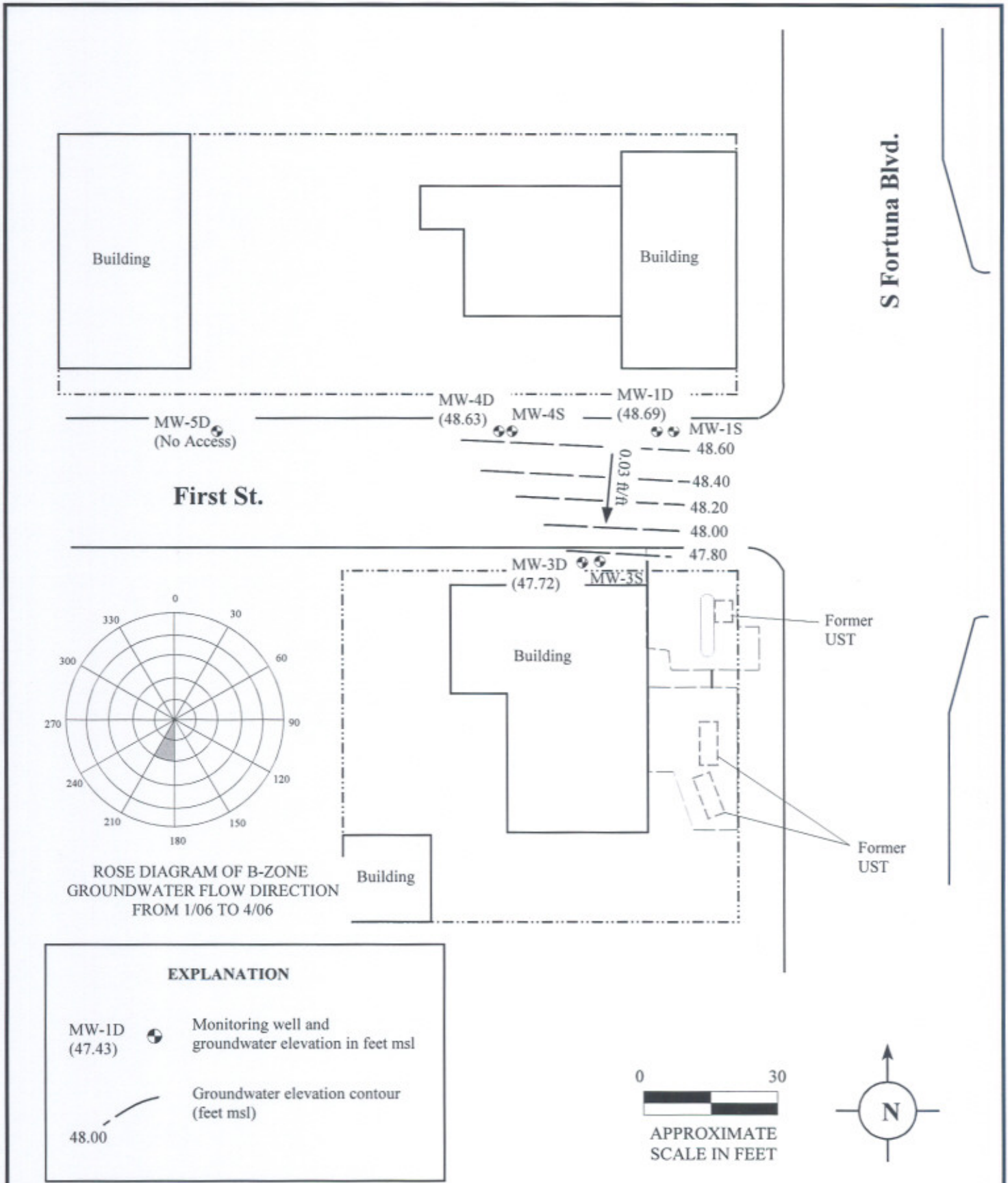
Project No.	Figure Date	Figure
NC-40	5/06	2



Groundwater Elevations and Gradient 4/4/06
(A-Zone 4-9 ft bgs)
Former Totem Pole Market
580 S. Fortuna Blvd
Fortuna, CA

BLUE ROCK ENVIRONMENTAL, INC.

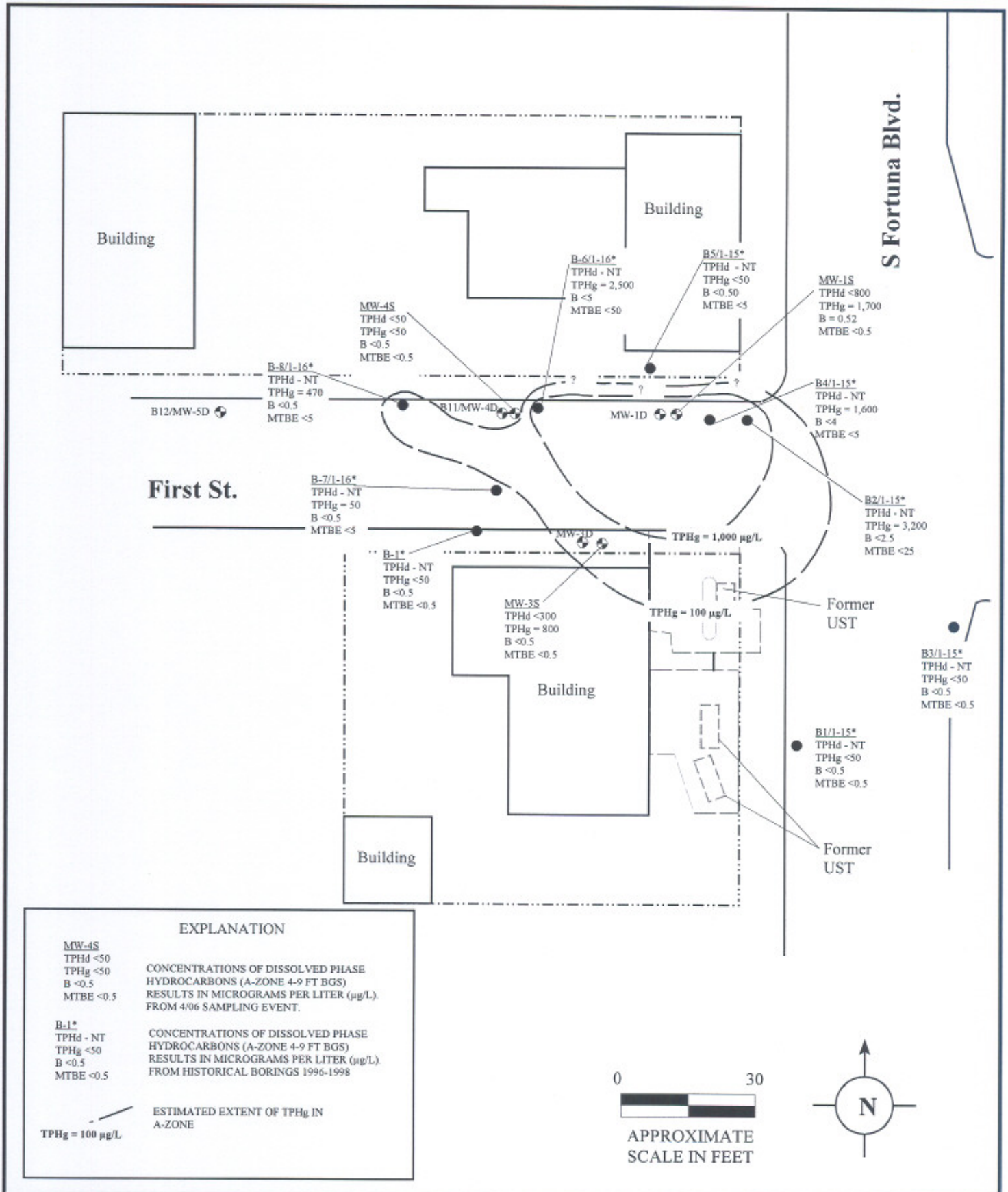
Project No.	Figure Date	Figure
NC-40	5/06	3a



Groundwater Elevations and Gradient 4/4/06
(B-Zone 14-19ft bgs)
Former Totem Pole Market
580 S. Fortuna Blvd
Fortuna, CA

BLUE ROCK ENVIRONMENTAL, INC.

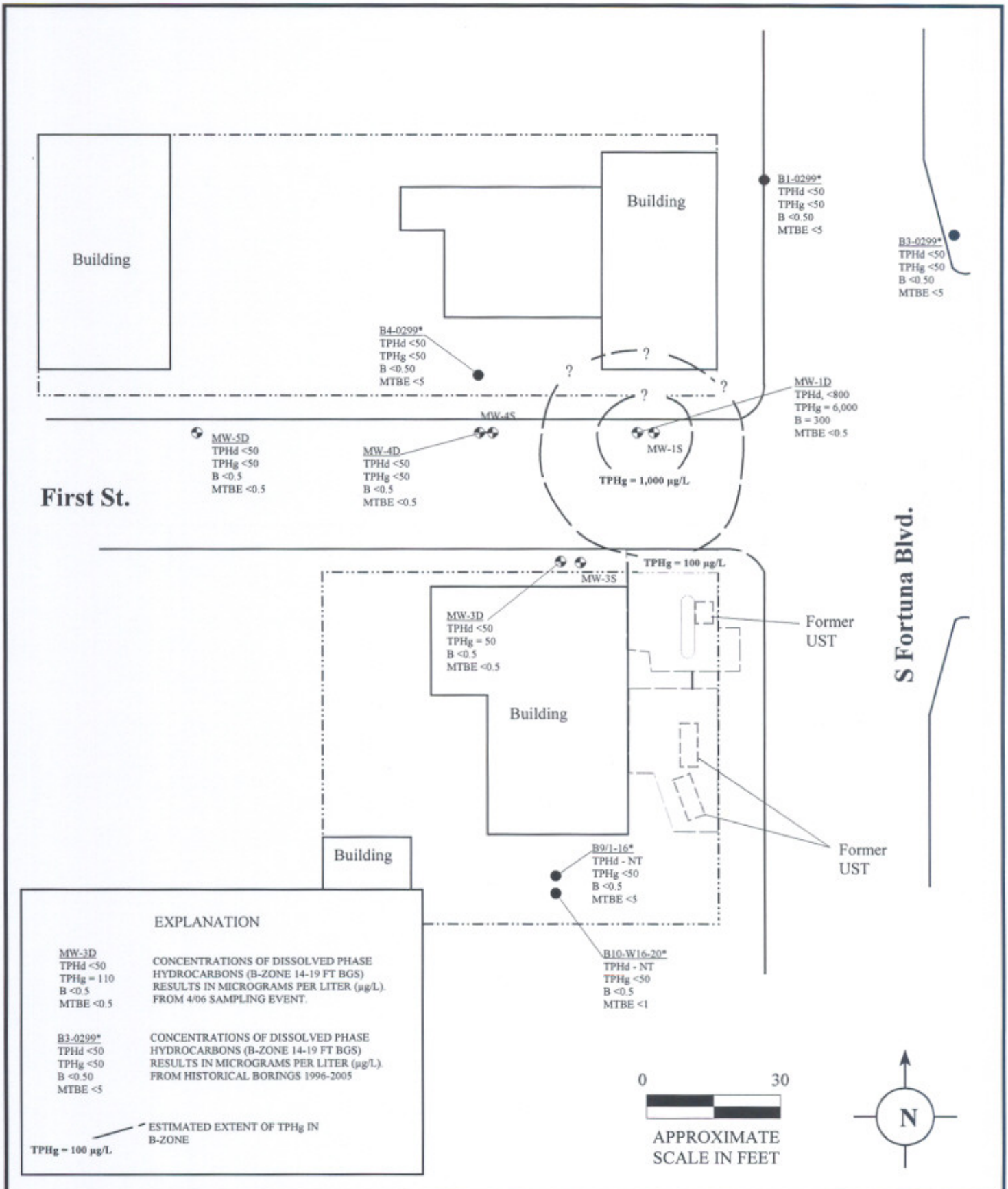
Project No.	Figure Date	Figure
NC-40	5/06	3b



Cumulative Groundwater Sample Data
(A-Zone 4-9 ft bgs)
Former Totem Pole Market
580 S. Fortuna Blvd
Fortuna, CA

BLUE ROCK ENVIRONMENTAL, INC.

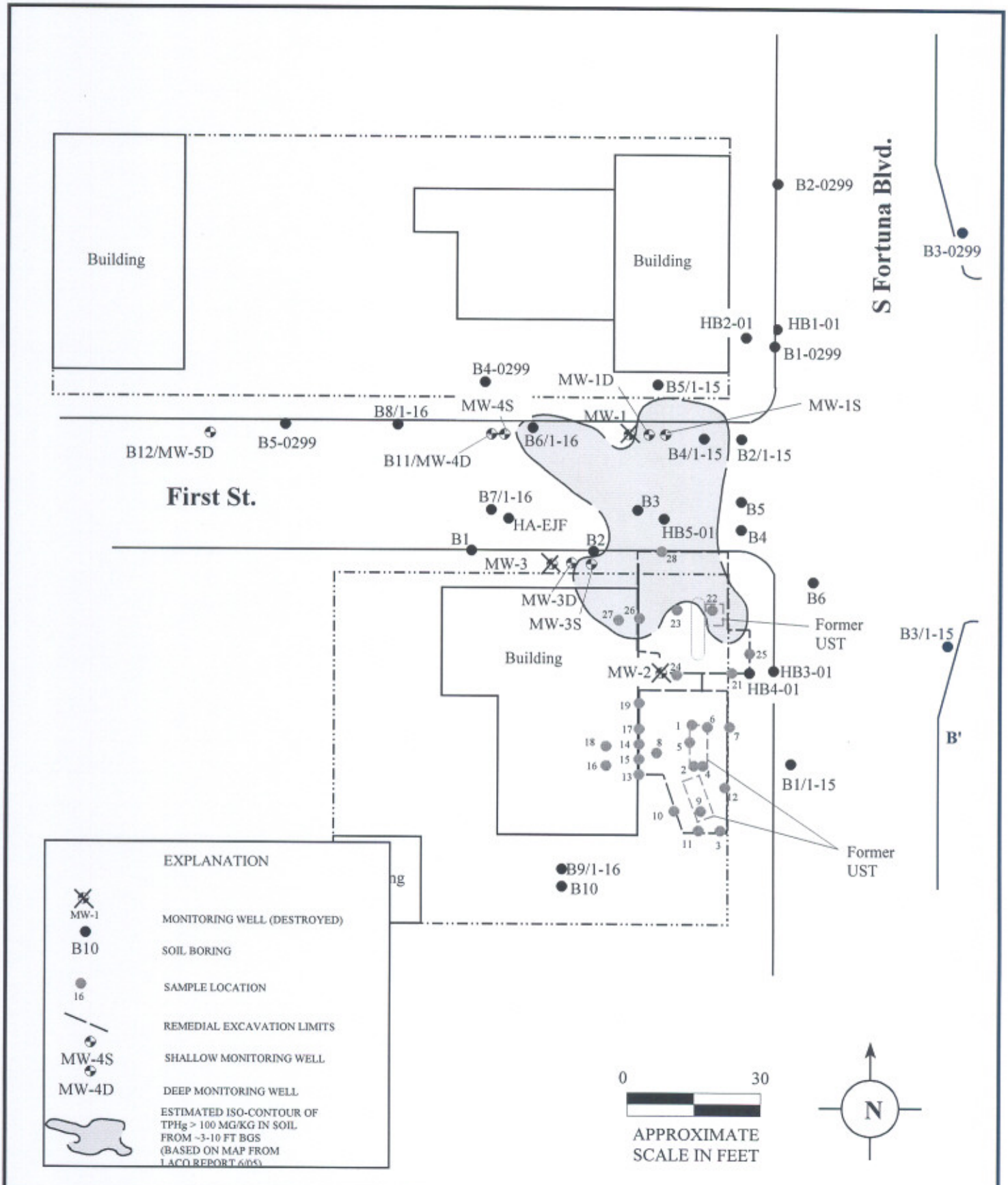
Project No.	Figure Date	Figure
NC-40	5/06	4a



Cumulative Groundwater Sample Data
(B-Zone 14-19 ft bgs)
Former Totem Pole Market
580 S. Fortuna Blvd
Fortuna, CA

BLUE ROCK ENVIRONMENTAL, INC.

Project No.	Figure Date	Figure
NC-40	5/06	4b



TPHg in Soil (~3-10 ft bgs)
Former Totem Pole Market
580 S. Fortuna Blvd
Fortuna, CA

BLUE ROCK ENVIRONMENTAL, INC.

Project No.	Figure Date	Figure
NC-40	5/06	5

GAGING DATA/PURGE CALCULATIONS

Job No.: NC-40 **Location:** 508 S. Fortuna Blvd. **Date:** 4/4/06 **Tech(s):** JL

WELL NO.	DIA. (in.)	DTB (ft.)	DTW (ft.)	ST (ft.)	CV (gal.)	PV (gal.)	SPH (ft.)	NOTES
MW-1D	2"	19.21	10.08	9.13	1.46	4.38	0	
MW-1S	↓	9.10	2.41	6.69	1.07	3.21	↓	
MW-3D		19.20	11.23	7.97	1.27	3.81		
MW-3S		9.11	2.24	6.87	1.09	3.27		
MW-4D		18.25	9.40	8.85	1.41	4.23		
MW-4S		8.55	3.46	5.09	0.81	2.43	↓	
MW-5D	↓	19.70						Covered by vehicle not sampled

Explanation:
DIA. = Well Diameter
DTB = Depth to Bottom
DTW = Depth to Water
ST = Saturated Thickness (DTB-DTW)
CV = Casing Volume (ST x cf)
PV = Purge Volume (standard 3 x CV, well development 10 x CV)
SPH = Thickness of Separate Phase Hydrocarbons

Conversion Factors (cf):
2 in. dia. well cf = 0.16 gal./ft.
4 in. dia. well cf = 0.65 gal./ft.
6 in. dia. well cf = 1.44 gal./ft.

BLUE ROCK ENVIRONMENTAL, INC.

PURGING DATA

SHEET 1 OF 3

Job No.: NC-410 **Location:** 508 S. Fortuna Blvd. **Date:** 4/4/06 **Tech:** JL

WELL No.	TIME	VOLUME (gal.)	COND. (mS/cm)	TEMP. (deg. F.)	pH
MW-1D			---	---	---
Calc. purge	10:40	0.25	583	59.0	6.48
volume	10:45	2.25	561	60.4	6.40
4.38	10:50	4.40	440	60.5	6.21

Sample for: TPHg TPHd 8260 BTEX MTBE Metals

Purging Method: PVC bailer / Pump

COMMENTS: color, turbidity, recharge, sheen

clear/ mod./ mod./ no sheen/ odor

Sampling Method: Dedicated / Disposable bailer

Sample at: 10:55

WELL No.	TIME	VOLUME (gal.)	COND. (mS/cm)	TEMP. (deg. F.)	pH
MW-1S			---	---	---
Calc. purge	11:00	0.25	478	58.2	6.43
volume	11:05	2.00	534	58.0	6.51
3.21	11:10	3.25	529	58.1	6.52

Sample for: TPHg TPHd 8260 BTEX MTBE Metals

Purging Method: PVC bailer / Pump

COMMENTS: color, turbidity, recharge, sheen

clear/ mod/ mod/ no sheen/ odor

Sampling Method: Dedicated / Disposable bailer

Sample at: 11:15

WELL No.	TIME	VOLUME (gal.)	COND. (mS/cm)	TEMP. (deg. F.)	pH
MW-3D			---	---	---
Calc. purge	11:20	0.25	424	59.9	6.68
volume	11:25	2.00	475	60.0	6.71
3.81	11:30	3.85	well dry @ 3 gal.		

Sample for: TPHg TPHd 8260 BTEX MTBE Metals

Purging Method: PVC bailer / Pump

COMMENTS: color, turbidity, recharge, sheen

clear/ mod./ ~~poor~~ poor/ no sheen/ no odor

Sampling Method: Dedicated / Disposable bailer

Sample at: 11:35

PURGING DATA

Job No.: NC-40 **Location:** 508 S. Fortuna Blvd **Date:** 4/4/06 **Tech:** JL

WELL No.	TIME	VOLUME (gal.)	COND. (mS/cm)	TEMP. (deg. F.)	pH
MW-3S			---	---	---
Calc. purge	11:40	0.25	235	54.8	6.50
volume	11:45	1.75	353	54.3	6.38
3.27	11:50	3.25	270	54.2	6.30

Sample for: TPHg TPHd 8260 BTEX MTBE Metals

Purging Method: PVC bailer / Pump

COMMENTS: color, turbidity, recharge, sheen: clear / mod / good / no sheen / odor

Sampling Method: Dedicated / Disposable bailer

Sample at: 11:55

WELL No.	TIME	VOLUME (gal.)	COND. (mS/cm)	TEMP. (deg. F.)	pH
MW-4D			---	---	---
Calc. purge	12:00	0.25	192	59.8	6.38
volume	12:05	2.25	199	60.0	6.46
4.23	12:10	4.25	well dry @		2.50 gal.

Sample for: TPHg TPHd 8260 BTEX MTBE Metals

Purging Method: PVC bailer / Pump

COMMENTS: color, turbidity, recharge, sheen: clear / mod / poor / no sheen / mg odor

Sampling Method: Dedicated / Disposable bailer

Sample at: 12:15

WELL No.	TIME	VOLUME (gal.)	COND. (mS/cm)	TEMP. (deg. F.)	pH
MW-4S			---	---	---
Calc. purge	12:20	0.25	212	56.6	6.06
volume	12:25	1.50	183	56.7	6.13
2.43	12:30	2.45	well	dry	@
			2.50	gal.	

Sample for: TPHg TPHd 8260 BTEX MTBE Metals

Purging Method: PVC bailer / Pump

COMMENTS: color, turbidity, recharge, sheen: clear / mod / poor / no sheen / mg odor

Sampling Method: Dedicated / Disposable bailer

Sample at: 12:35

PURGING DATA

SHEET 3 OF 3

Job No.: NC-40 **Location:** 508 S. Fortuna Blvd, **Date:** 4/4/06 **Tech:** JL

WELL No.	TIME	VOLUME (gal.)	COND. (mS/cm)	TEMP. (deg. F.)	pH	
MW-5D			---	---	---	Sample for:
Calc. purge						TPHg TPHd 8260
volume						BTEX MTBE Metals
_____						Purging Method:
						PVC bailer / Pump
COMMENTS: color, turbidity, recharge, sheen						Sampling Method:
well not accessable, not sampled						Dedicated / Disposable bailer
						Sample at:

WELL No.	TIME	VOLUME (gal.)	COND. (mS/cm)	TEMP. (deg. F.)	pH	
			---	---	---	Sample for:
Calc. purge						TPHg TPHd 8260
volume						BTEX MTBE Metals
_____						Purging Method:
						PVC bailer / Pump
COMMENTS: color, turbidity, recharge, sheen						Sampling Method:
						Dedicated / Disposable bailer
						Sample at:

WELL No.	TIME	VOLUME (gal.)	COND. (mS/cm)	TEMP. (deg. F.)	pH	
			---	---	---	Sample for:
Calc. purge						TPHg TPHd 8260
volume						BTEX MTBE Metals
_____						Purging Method:
						PVC bailer / Pump
COMMENTS: color, turbidity, recharge, sheen						Sampling Method:
						Dedicated / Disposable bailer
						Sample at:

KIFF Analytical LLC

Report Number : 49342
Date : 4/11/2006

Andrew LoCicero
Blue Rock Environmental, Inc.
535 3rd Street, Suite 100
Eureka, CA 95501

Subject : 6 Water Samples
Project Name : Former Totem Pole Market
Project Number : NC-40

Dear Mr. LoCicero,

Chemical analysis of the samples referenced above has been completed. Summaries of the data are contained on the following pages. Sample(s) were received under documented chain-of-custody. US EPA protocols for sample storage and preservation were followed.

Kiff Analytical is certified by the State of California (# 2236). If you have any questions regarding procedures or results, please call me at 530-297-4800.

Sincerely,

Joel Kiff

KIFF Analytical LLC

Report Number : 49342
Date : 4/11/2006

Subject : 6 Water Samples
Project Name : Former Totem Pole Market
Project Number : NC-40

Case Narrative

The Method Reporting Limit for TPH as Diesel is increased due to interference from Gasoline-Range Hydrocarbons for samples MW-1D, MW-1S and MW-3S.

Approved By: Joel Kiff

2795 2nd St, Suite 300 Davis, CA 95616 530-297-4800

KIFF Analytical LLC

Report Number : 49342
Date : 4/11/2006

Project Name : **Former Totem Pole Market**
Project Number : **NC-40**

Sample : **MW-1D** Matrix : Water Lab Number : 49342-01
Sample Date :4/4/2006

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**300**	0.50	ug/L	EPA 8260B	4/8/2006
Toluene	**4.4**	0.50	ug/L	EPA 8260B	4/8/2006
Ethylbenzene	**130**	0.50	ug/L	EPA 8260B	4/8/2006
Total Xylenes	**190**	0.50	ug/L	EPA 8260B	4/8/2006
Methyl-t-butyl ether (MTBE)	**< 0.50**	0.50	ug/L	EPA 8260B	4/8/2006
TPH as Gasoline	**6000**	90	ug/L	EPA 8260B	4/8/2006
Toluene - d8 (Surr)	93.2		% Recovery	EPA 8260B	4/8/2006
4-Bromofluorobenzene (Surr)	100		% Recovery	EPA 8260B	4/8/2006
TPH as Diesel (Silica Gel)	**< 800**	800	ug/L	M EPA 8015	4/8/2006
Octacosane (Diesel Surrogate)	90.8		% Recovery	M EPA 8015	4/8/2006

Sample : **MW-1S** Matrix : Water Lab Number : 49342-02
Sample Date :4/4/2006

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**0.52**	0.50	ug/L	EPA 8260B	4/8/2006
Toluene	**< 0.50**	0.50	ug/L	EPA 8260B	4/8/2006
Ethylbenzene	**6.9**	0.50	ug/L	EPA 8260B	4/8/2006
Total Xylenes	**< 0.50**	0.50	ug/L	EPA 8260B	4/8/2006
Methyl-t-butyl ether (MTBE)	**< 0.50**	0.50	ug/L	EPA 8260B	4/8/2006
TPH as Gasoline	**1700**	50	ug/L	EPA 8260B	4/8/2006
Toluene - d8 (Surr)	104		% Recovery	EPA 8260B	4/8/2006
4-Bromofluorobenzene (Surr)	96.3		% Recovery	EPA 8260B	4/8/2006
TPH as Diesel (Silica Gel)	**< 800**	800	ug/L	M EPA 8015	4/8/2006
Octacosane (Diesel Surrogate)	92.8		% Recovery	M EPA 8015	4/8/2006

Approved By: Joel Kiff

2795 2nd St., Suite 300 Davis, CA 95616 530-297-4800

KIFF Analytical LLC

Report Number : 49342
Date : 4/11/2006

Project Name : **Former Totem Pole Market**
Project Number : **NC-40**

Sample : **MW-3D** Matrix : Water Lab Number : 49342-03
Sample Date :4/4/2006

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**< 0.50**	0.50	ug/L	EPA 8260B	4/8/2006
Toluene	**< 0.50**	0.50	ug/L	EPA 8260B	4/8/2006
Ethylbenzene	**< 0.50**	0.50	ug/L	EPA 8260B	4/8/2006
Total Xylenes	**< 0.50**	0.50	ug/L	EPA 8260B	4/8/2006
Methyl-t-butyl ether (MTBE)	**< 0.50**	0.50	ug/L	EPA 8260B	4/8/2006
TPH as Gasoline	**< 50**	50	ug/L	EPA 8260B	4/8/2006
Toluene - d8 (Surr)	97.4		% Recovery	EPA 8260B	4/8/2006
4-Bromofluorobenzene (Surr)	99.0		% Recovery	EPA 8260B	4/8/2006
TPH as Diesel (Silica Gel)	**< 50**	50	ug/L	M EPA 8015	4/11/2006
Octacosane (Diesel Surrogate)	96.2		% Recovery	M EPA 8015	4/11/2006

Sample : **MW-3S** Matrix : Water Lab Number : 49342-04
Sample Date :4/4/2006

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**< 0.50**	0.50	ug/L	EPA 8260B	4/7/2006
Toluene	**< 0.50**	0.50	ug/L	EPA 8260B	4/7/2006
Ethylbenzene	**< 0.50**	0.50	ug/L	EPA 8260B	4/7/2006
Total Xylenes	**0.74**	0.50	ug/L	EPA 8260B	4/7/2006
Methyl-t-butyl ether (MTBE)	**< 0.50**	0.50	ug/L	EPA 8260B	4/7/2006
TPH as Gasoline	**800**	50	ug/L	EPA 8260B	4/7/2006
Toluene - d8 (Surr)	107		% Recovery	EPA 8260B	4/7/2006
4-Bromofluorobenzene (Surr)	91.9		% Recovery	EPA 8260B	4/7/2006
TPH as Diesel (Silica Gel)	**< 300**	300	ug/L	M EPA 8015	4/8/2006
Octacosane (Diesel Surrogate)	97.4		% Recovery	M EPA 8015	4/8/2006

Approved By: Joel Kiff

2795 2nd St., Suite 300 Davis, CA 95616 530-297-4800

KIFF Analytical LLC

Report Number : 49342
Date : 4/11/2006

Project Name : **Former Totem Pole Market**
Project Number : **NC-40**

Sample : **MW-4D** Matrix : Water Lab Number : 49342-05
Sample Date :4/4/2006

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**< 0.50**	0.50	ug/L	EPA 8260B	4/8/2006
Toluene	**< 0.50**	0.50	ug/L	EPA 8260B	4/8/2006
Ethylbenzene	**< 0.50**	0.50	ug/L	EPA 8260B	4/8/2006
Total Xylenes	**< 0.50**	0.50	ug/L	EPA 8260B	4/8/2006
Methyl-t-butyl ether (MTBE)	**< 0.50**	0.50	ug/L	EPA 8260B	4/8/2006
TPH as Gasoline	**< 50**	50	ug/L	EPA 8260B	4/8/2006
Toluene - d8 (Surr)	104		% Recovery	EPA 8260B	4/8/2006
4-Bromofluorobenzene (Surr)	94.7		% Recovery	EPA 8260B	4/8/2006
TPH as Diesel (Silica Gel)	**< 50**	50	ug/L	M EPA 8015	4/8/2006
Octacosane (Diesel Surrogate)	95.0		% Recovery	M EPA 8015	4/8/2006

Sample : **MW-4S** Matrix : Water Lab Number : 49342-06
Sample Date :4/4/2006

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**< 0.50**	0.50	ug/L	EPA 8260B	4/7/2006
Toluene	**< 0.50**	0.50	ug/L	EPA 8260B	4/7/2006
Ethylbenzene	**< 0.50**	0.50	ug/L	EPA 8260B	4/7/2006
Total Xylenes	**< 0.50**	0.50	ug/L	EPA 8260B	4/7/2006
Methyl-t-butyl ether (MTBE)	**< 0.50**	0.50	ug/L	EPA 8260B	4/7/2006
TPH as Gasoline	**< 50**	50	ug/L	EPA 8260B	4/7/2006
Toluene - d8 (Surr)	108		% Recovery	EPA 8260B	4/7/2006
4-Bromofluorobenzene (Surr)	92.2		% Recovery	EPA 8260B	4/7/2006
TPH as Diesel (Silica Gel)	**< 50**	50	ug/L	M EPA 8015	4/8/2006
Octacosane (Diesel Surrogate)	94.8		% Recovery	M EPA 8015	4/8/2006

Approved By: Joel Kiff

2795 2nd St., Suite 300 Davis, CA 95616 530-297-4800

Report Number : 49342

Date : 4/11/2006

QC Report : Method Blank Data

Project Name : **Former Totem Pole Market**

Project Number : **NC-40**

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
TPH as Diesel (Silica Gel)	< 50	50	ug/L	M EPA 8015	4/8/2006
Octacosane (Diesel Surrogate)	97.2		%	M EPA 8015	4/8/2006
TPH as Diesel (Silica Gel)	< 50	50	ug/L	M EPA 8015	4/10/2006
Octacosane (Diesel Surrogate)	88.2		%	M EPA 8015	4/10/2006
Benzene	< 0.50	0.50	ug/L	EPA 8260B	4/8/2006
Toluene	< 0.50	0.50	ug/L	EPA 8260B	4/8/2006
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	4/8/2006
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	4/8/2006
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	4/8/2006
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	4/8/2006
Toluene - d8 (Surr)	105		%	EPA 8260B	4/8/2006
4-Bromofluorobenzene (Surr)	96.9		%	EPA 8260B	4/8/2006
Benzene	< 0.50	0.50	ug/L	EPA 8260B	4/7/2006
Toluene	< 0.50	0.50	ug/L	EPA 8260B	4/7/2006
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	4/7/2006
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	4/7/2006
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	4/7/2006
Toluene - d8 (Surr)	95.2		%	EPA 8260B	4/7/2006
4-Bromofluorobenzene (Surr)	99.3		%	EPA 8260B	4/7/2006

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	4/8/2006
Benzene	< 0.50	0.50	ug/L	EPA 8260B	4/7/2006
Toluene	< 0.50	0.50	ug/L	EPA 8260B	4/7/2006
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	4/7/2006
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	4/7/2006
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	4/7/2006
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	4/7/2006
Toluene - d8 (Surr)	108		%	EPA 8260B	4/7/2006
4-Bromofluorobenzene (Surr)	90.8		%	EPA 8260B	4/7/2006
Benzene	< 0.50	0.50	ug/L	EPA 8260B	4/7/2006
Toluene	< 0.50	0.50	ug/L	EPA 8260B	4/7/2006
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	4/7/2006
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	4/7/2006
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	4/7/2006
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	4/7/2006
Toluene - d8 (Surr)	108		%	EPA 8260B	4/7/2006
4-Bromofluorobenzene (Surr)	91.2		%	EPA 8260B	4/7/2006
Benzene	< 0.50	0.50	ug/L	EPA 8260B	4/7/2006
Toluene	< 0.50	0.50	ug/L	EPA 8260B	4/7/2006
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	4/7/2006
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	4/7/2006
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	4/7/2006
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	4/7/2006
Toluene - d8 (Surr)	93.6		%	EPA 8260B	4/7/2006
4-Bromofluorobenzene (Surr)	96.5		%	EPA 8260B	4/7/2006

Approved By: Joel Kiff

KIFF ANALYTICAL, LLC

2795 2nd St, Suite 300 Davis, CA 95616 530-297-4800

Report Number : 49342

QC Report : Matrix Spike/ Matrix Spike Duplicate

Date : 4/11/2006

Project Name : **Former Totem Pole Market**

Project Number : **NC-40**

Parameter	Spiked Sample	Sample Value	Spike Level	Spike Dup. Level	Spiked Sample Value	Duplicate Spiked Sample Value	Units	Analysis Method	Date Analyzed	Spiked Sample Percent Recov.	Duplicate Spiked Sample Percent Recov.	Relative Percent Diff.	Spiked Sample Percent Recov. Limit	Relative Percent Diff. Limit
Benzene	49409-06	<0.50	40.0	40.0	41.1	39.6	ug/L	EPA 8260B	4/8/06	103	99.1	3.67	70-130	25
Toluene	49409-06	<0.50	40.0	40.0	44.0	41.9	ug/L	EPA 8260B	4/8/06	110	105	4.87	70-130	25
Tert-Butanol	49409-06	<5.0	200	200	212	210	ug/L	EPA 8260B	4/8/06	106	105	1.14	70-130	25
Methyl-t-Butyl Ether	49409-06	5.5	40.0	40.0	46.3	46.3	ug/L	EPA 8260B	4/8/06	102	102	0.140	70-130	25
Benzene	49365-01	<0.50	40.0	40.0	43.5	41.7	ug/L	EPA 8260B	4/7/06	109	104	4.21	70-130	25
Toluene	49365-01	<0.50	40.0	40.0	42.2	40.3	ug/L	EPA 8260B	4/7/06	106	101	4.84	70-130	25
Tert-Butanol	49365-01	<5.0	200	200	204	205	ug/L	EPA 8260B	4/7/06	102	103	0.491	70-130	25
Methyl-t-Butyl Ether	49365-01	<0.50	40.0	40.0	41.6	40.6	ug/L	EPA 8260B	4/7/06	104	102	2.38	70-130	25
Benzene	49408-07	<0.50	40.0	40.0	43.1	42.6	ug/L	EPA 8260B	4/8/06	108	106	1.24	70-130	25
Toluene	49408-07	<0.50	40.0	40.0	42.1	41.4	ug/L	EPA 8260B	4/8/06	105	104	1.72	70-130	25
Tert-Butanol	49408-07	<5.0	200	200	194	197	ug/L	EPA 8260B	4/8/06	97.2	98.6	1.52	70-130	25
Methyl-t-Butyl Ether	49408-07	32	40.0	40.0	73.1	73.3	ug/L	EPA 8260B	4/8/06	102	102	0.508	70-130	25
Benzene	49342-06	<0.50	40.0	40.0	43.1	41.6	ug/L	EPA 8260B	4/7/06	108	104	3.43	70-130	25
Toluene	49342-06	<0.50	40.0	40.0	45.3	43.6	ug/L	EPA 8260B	4/7/06	113	109	3.79	70-130	25
Tert-Butanol	49342-06	<5.0	200	200	215	216	ug/L	EPA 8260B	4/7/06	108	108	0.217	70-130	25
Methyl-t-Butyl Ether	49342-06	<0.50	40.0	40.0	42.3	42.1	ug/L	EPA 8260B	4/7/06	106	105	0.608	70-130	25
Benzene	49342-04	<0.50	40.0	40.0	45.1	44.1	ug/L	EPA 8260B	4/7/06	113	110	2.25	70-130	25
Toluene	49342-04	<0.50	40.0	40.0	47.1	46.2	ug/L	EPA 8260B	4/7/06	118	116	1.90	70-130	25

Approved By: Joel Kiff

KIFF ANALYTICAL, LLC

2795 2nd St, Suite 300 Davis, CA 95616 530-297-4800

Report Number : 49342

QC Report : Matrix Spike/ Matrix Spike Duplicate

Date : 4/11/2006

Project Name : **Former Totem Pole Market**

Project Number : **NC-40**

Parameter	Spiked Sample	Sample Value	Spike Level	Spike Dup. Level	Spiked Sample Value	Duplicate Spiked Sample Value	Units	Analysis Method	Date Analyzed	Spiked Sample Percent Recov.	Duplicate Spiked Sample Percent Recov.	Relative Percent Diff.	Spiked Sample Percent Recov. Limit	Relative Percent Diff. Limit
Tert-Butanol	49342-04	<5.0	200	200	228	225	ug/L	EPA 8260B	4/7/06	114	112	1.35	70-130	25
Methyl-t-Butyl Ether	49342-04	<0.50	40.0	40.0	44.5	44.5	ug/L	EPA 8260B	4/7/06	111	111	0.0658	70-130	25
Benzene	49371-02	<0.50	40.0	40.0	41.4	40.4	ug/L	EPA 8260B	4/7/06	103	101	2.24	70-130	25
Toluene	49371-02	<0.50	40.0	40.0	40.9	40.1	ug/L	EPA 8260B	4/7/06	102	100	1.95	70-130	25
Tert-Butanol	49371-02	<5.0	200	200	212	206	ug/L	EPA 8260B	4/7/06	106	103	2.68	70-130	25
Methyl-t-Butyl Ether	49371-02	<0.50	40.0	40.0	40.4	40.2	ug/L	EPA 8260B	4/7/06	101	100	0.693	70-130	25
TPH as Diesel	Blank	<50	1000	1000	827	785	ug/L	M EPA 8015	4/10/06	82.7	78.5	5.27	70-130	25
TPH as Diesel	Blank	<50	1000	1000	887	806	ug/L	M EPA 8015	4/10/06	88.7	80.6	9.56	70-130	25

Approved By: Joel Kiff

KIFF ANALYTICAL, LLC

2795 2nd St, Suite 300 Davis, CA 95616 530-297-4800

Report Number : 49342

QC Report : Laboratory Control Sample (LCS)

Date : 4/11/2006

Project Name : **Former Totem Pole Market**

Project Number : **NC-40**

Parameter	Spike Level	Units	Analysis Method	Date Analyzed	LCS Percent Recov.	LCS Percent Recov. Limit
Benzene	40.0	ug/L	EPA 8260B	4/8/06	99.4	70-130
Toluene	40.0	ug/L	EPA 8260B	4/8/06	109	70-130
Tert-Butanol	200	ug/L	EPA 8260B	4/8/06	104	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	4/8/06	102	70-130
Benzene	40.0	ug/L	EPA 8260B	4/7/06	106	70-130
Toluene	40.0	ug/L	EPA 8260B	4/7/06	103	70-130
Tert-Butanol	200	ug/L	EPA 8260B	4/7/06	108	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	4/7/06	101	70-130
Benzene	40.0	ug/L	EPA 8260B	4/8/06	107	70-130
Toluene	40.0	ug/L	EPA 8260B	4/8/06	107	70-130
Tert-Butanol	200	ug/L	EPA 8260B	4/8/06	101	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	4/8/06	102	70-130
Benzene	40.0	ug/L	EPA 8260B	4/7/06	107	70-130
Toluene	40.0	ug/L	EPA 8260B	4/7/06	116	70-130
Tert-Butanol	200	ug/L	EPA 8260B	4/7/06	107	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	4/7/06	108	70-130
Benzene	40.0	ug/L	EPA 8260B	4/7/06	107	70-130

Approved By: Joel Kiff

KIFF ANALYTICAL, LLC

2795 2nd St, Suite 300 Davis, CA 95616 530-297-4800

Report Number : 49342

QC Report : Laboratory Control Sample (LCS)

Date : 4/11/2006

Project Name : **Former Totem Pole Market**

Project Number : **NC-40**

Parameter	Spike Level	Units	Analysis Method	Date Analyzed	LCS Percent Recov.	LCS Percent Recov. Limit
Toluene	40.0	ug/L	EPA 8260B	4/7/06	117	70-130
Tert-Butanol	200	ug/L	EPA 8260B	4/7/06	110	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	4/7/06	105	70-130
Benzene	40.0	ug/L	EPA 8260B	4/7/06	104	70-130
Toluene	40.0	ug/L	EPA 8260B	4/7/06	102	70-130
Tert-Butanol	200	ug/L	EPA 8260B	4/7/06	103	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	4/7/06	103	70-130

Approved By: Joel Kiff

KIFF ANALYTICAL, LLC

2795 2nd St, Suite 300 Davis, CA 95616 530-297-4800

KIFF Analytical LLC

2795 2nd Street, Suite 300
Davis, CA 95616
Lab: 530.297.4800
Fax: 530.297.4802

SRG # / Lab No. 49342

Page 1 of 1

Chain-of-Custody Record and Analysis Request

Project Contact (Hardcopy or PDF To): Andrew LaCicero

California EDF Report? ☒ Yes ☐ No

Company / Address: Blue Rock Env. Inc. 535 3rd St. Ste. 100 Eureka, CA

Sampling Company Log Code:

Phone #: (707) 441-1934 Fax #: (707) 441-1949

Global ID: T0602300028

Project #: NC-40 P.O. #:

EDF Deliverable To (Email Address): andrew@bluerockenv.com

Project Name: Former Totem Pole Market

Sampler Signature: James Lindeman

Project Address: 508 S. Fortuna Blvd, Fortuna, CA

Sample Designation	Sampling: Date	Sampling: Time	Container: 40 ml VOA	Container: Sleeve	Container: Poly	Container: Glass	Container: Tedlar	Preservative: HCl	Preservative: HNO_3	Preservative: None	Matrix: Water	Matrix: Soil	Matrix: Air	Analysis Request: MTBE (EPA 8260B) per EPA 8021 level @ 5.0 ppb	Analysis Request: MTBE (EPA 8260B) @ 0.5 ppb	Analysis Request: BTEX (EPA 8260B)	Analysis Request: TPH Gas (EPA 8260B)	Analysis Request: 5 Oxygenates (EPA 8260B)	Analysis Request: 7 Oxygenates (EPA 8260B)	Analysis Request: Lead Scav.(1,2 DCA & 1,2 EDB-EPA 8260B)	Analysis Request: Volatile Halocarbons (EPA 8260B)	Analysis Request: Volatile Organics Full List (EPA 8260B)	Analysis Request: Volatile Organics (EPA 524.2 Drinking Water)	Analysis Request: TPH as Diesel (EPA 8015M) Silica gel	Analysis Request: TPH as Motor Oil (EPA 8015M)	Analysis Request: Total Lead (EPA 6010)	Analysis Request: W.E.T. Lead (STLC)	TAT	For Lab Use Only
MW-1D	4/4/06	10:55	6					X			X				X	X	X							X					X	01
MW-1S		11:15																												02
MW-3D		11:35																												03
MW-3S		11:55																												04
MW-4D		12:15																												05
MW-4S		12:35																												06

Relinquished by:	Date	Time	Received by:
James Lindeman	4/4/06		Fed Ex
	040506	1045	Kris McLee Kiff Analytical

Remarks:

Bill to:

For Lab Use Only: Sample Receipt

Temp °C	Initials	Date	Time	Therm. ID #	Coolant Present
3.0	RLM	040506	1030	IR1	(Yes) / No

Distribution: White - Lab; Pink - Originator
Rev: 051805